



Nuclease Surface Decontaminant

RNase Away is a nuclease decontaminant designed to eliminate all RNase and DNA contamination from laboratory surfaces, apparatus, benchtops, and barrels of pipettors. It can reduce researchers' dependence on carcinogenic diethyl pyrocarbonate treatments and save time needed to bake glassware. The user simply adds RNase Away to the surface to be decontaminated and rinse. **Molecular Bio-Products. Circle 137.**

Genomic DNA Isolation Kits

The G Nome DNA Isolation Kit and G Nome Whole Blood DNA Isolation Kit rapidly isolate genomic DNA from whole blood, cells, bacteria, yeast, and tissue of any type. Cells or nuclei are lysed in sodium dodecyl sulfate. RNA and protein are enzymatically digested. Whole blood cells are lysed and DNA is isolated from the nuclei. The proprietary salting-out technique precludes the need for phenol, chloroform, or ether extractions. No columns, cartridges, or filter units are required. The resulting DNA is a ready substrate for restriction enzyme digestion, polymerases, and other modifying enzymes. **BIO 101. Circle 138.**

Graphing and Data Software Upgrade

Igor Pro 2.0 is a major update to a scientific graphing and data

analysis package for the Macintosh. The program concentrates on extensive control of XY graphs to satisfy the requirements of the most demanding scientific journals. Graphics can be exported as EPS files. The new version has many improved features, including multiple positionable axes, additional markers, editable dashed lines, text rotation, interactive and programmable drawing tools with multiple coordinate systems, user-defined buttons and read-outs, and support for data acquisition. **WaveMetrics. Circle 139.**

Agglutination Reagent

Red-Out is a human red blood cell agglutination reagent that eliminates the red cell contamination that frequently occurs when purifying lymphocytes on density gradient media. Human blood is incubated at room temperature for 5 min with Red-Out, then centrifuged in Isoprep isolation media or other ficoll-isopaque type media. Red cell aggregates settle to the bottom of the tube. The high specificity of Red-Out is based on a murine monoclonal antibody that binds to a universally present antigen on erythrocyte membranes. The reagent removes the cells, including immature nucleated erythrocytes, that interfere in a number of applications, including HLA tissue typing tests, microscopic analysis, and fluorescence-activated cell sorting. **Robbins Scientific. Circle 140.**

Benchtop Baths

The benchtop Multi-Cool baths provide up to 8 liters of working fluid volume at temperatures between -80°C and $+100^{\circ}\text{C}$ for temperature testing requirements. A powerful magnetic stirrer in the

bottom of the bath agitates the fluid for optimal temperature uniformity and stability. An optional circulating pump can be mounted in the bath to pump the thermally conditioned fluid to cool or heat an external test fixture. The cold baths are chlorofluorocarbon free. **FTS Systems. Circle 141.**

Personal Thermocycler

The Personal Cyclo is a Peltier-based thermocycler with many features: 100-program memory;



hot start, touch down, and auto-restart functions; a capacity for either 48 0.2-ml or 20 0.5-ml tubes; bilingual liquid crystal display; and Centronics and RS232 interface. **Biometra. Circle 142.**

Antibodies

Four new monoclonal antibodies (mAbs) to human endothelin are generated against endothelin-1 (ET-1), and each has a different reaction profile with ET-1, ET-2, ET-3, and big endothelin. All four mAbs are of the immunoglobulin G_1 subclass. **QED. Circle 143.**

A rabbit polyclonal antibody is available to the *N*-methyl-D-aspartate receptor. This receptor is involved in neuronal development, synaptic plasticity, and learning and memory, and has been implicated in neuronal de-

generation, neuron death, stroke, epilepsy, and neurodegenerative diseases. **CHEMICON International. Circle 144.**

More Cytokine Assays

Four new human analytes have been added to the line of Biotrak cytokine assays. The new assays are for the detection of oncostatin M, interleukin-6 soluble receptor, and soluble tumor necrosis factor receptors I and II. The measurement of cytokines is an important factor in research into the molecular mechanisms that underlie major disease processes such as inflammation, cancer, the immune response, and cardiovascular disease. **Amersham International. Circle 145.**

Literature

HPLC Reference Literature is a listing of reference books and publications on all aspects of high-performance liquid chromatography (HPLC). **Phenomenex. Circle 146.**

Environmental Report is a free newsletter on techniques and instruments for environmental analysis. **Thermo Separation Products. Circle 147.**

Molecular Biology Reagents lists dozens of buffers, solvents, and reagents for use in the biochemistry and molecular biology lab. **EM Science. Circle 148.**

SFX: Supercritical Fluid Extraction from Isco is a 20-page catalog on a line of equipment that uses safe, inexpensive carbon dioxide in place of hazardous solvents to obtain concentrated extracts for chromatographic or spectroscopic analysis. **Isco. Circle 149.**

Whenever and Wherever You Want It, Here's the Instrument for Particle Sizing is a brochure on the Mastersizer Micro, a laser diffraction instrument. **Malvern Instruments. Circle 150.**

Newly offered instrumentation, apparatus, and laboratory materials of interest to researchers in all disciplines in academic, industrial, and government organizations are featured in this space. Emphasis is given to purpose, chief characteristics, and availability of products and materials. Endorsement by *Science* or AAAS is not implied. Additional information may be obtained from the manufacturers or suppliers named by circling the appropriate number on the Readers' Service Card and placing it in a mailbox. Postage is free.

SCIENCE

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POSITIONS OPEN

The Division of Cardiology, Medical College of Virginia/Virginia Commonwealth University seeks qualified full-time collateral-track physician scientist at **ASSOCIATE PROFESSOR/PROFESSOR** level with expertise in molecular cardiology. Candidates should be experienced investigators capable of directing a Molecular Cardiology Research Program, and must be Board certified in Internal Medicine and BC/BE in cardiology. Applicants should send curriculum vitae and a summary of research interest to: **Dr. George W. Vetrovec, Chief of Cardiology, P.O. Box 980036, Medical College of Virginia, Richmond, VA 23298-0036.** *Virginia Commonwealth University is an Equal Opportunity/Affirmative Action Employer. Women, minorities and persons with disabilities are encouraged to apply.*

The Department of Physiology, Pharmacology and Toxicology is inviting applications for positions at the **ASSISTANT/ASSOCIATE PROFESSOR** levels. Qualifications include a Ph.D. in Physiology and Pharmacology or a related biomedical science. The D.V.M. degree is desirable but not required. Candidates will be expected to bring a high level of excellence in the teaching of veterinary medical, allied health, and graduate students and to develop active, independent research supported by extramural funds. Although we are seeking candidates in gastroenterology (ruminant and simple), endocrinology, neurophysiology, cardiovascular physiology, general and clinical pharmacology, all applicants in related areas will be considered. Interested candidates should submit curriculum vitae, names of three references, and a statement of research interests and goals to: **Dr. James E. Webster, Acting Chair, Department of Physiology, School of Veterinary Medicine, Tuskegee University, Tuskegee, AL 36088.** Applications will be accepted until positions are filled. *Tuskegee University is an Equal Opportunity/Affirmative Action Employer/Educator.*

FACULTY POSITION IN NEUROBIOLOGY OF AGING AND ALZHEIMER'S DISEASE. The Department of Neurobiology and Anatomy at the University of Rochester Medical School invites applications for a tenure-track position at the **ASSOCIATE PROFESSOR** level. Applicants must have a Ph.D. and/or M.D. degree, significant extramural funding, and a record of research and teaching accomplishments consonant with an advanced appointment. Research interests should be in neuronal cell biology related to cell death, cytoskeletal function or regulation of expression. The presence of an interdepartmental Alzheimer's Disease Center and a Training Grant in the Neurobiology of Aging and Alzheimer's Disease provides opportunities for human research material, pilot research funds, graduate students and postdoctoral fellows. A commitment to participate in medical and graduate education is required. Candidates will be considered at the Assistant Professor level provided they have significant extramural funding. Candidates should send curriculum vitae, a description of current and future research interests and the names of three references to: **Dr. John T. Hansen, Chair, Department of Neurobiology and Anatomy, Box 603, University of Rochester School of Medicine and Dentistry, 601 Elmwood Avenue, Rochester, NY 14642.** *The University of Rochester is an Affirmative Action/Equal Opportunity Employer committed to a smoke-free environment.*

ANATOMIST/PHYSIOLOGIST (Fall 1994)

The Department of Biology at the College of St. Catherine seeks a broadly trained biologist to fill a full-time temporary position at the level of **ASSISTANT PROFESSOR** beginning fall 1994.

Responsibilities: Courses to be taught include neurobiology, anatomy and physiology for non-majors, and comparative physiology and anatomy for majors.

Qualifications: Doctoral degree and demonstrated excellence in teaching in both lecture and laboratory format at the undergraduate level is required. Successful candidate must be committed to developing a research program in which undergraduates can participate.

To apply send letter of interest, curriculum vitae, three letters of recommendation, and a statement of teaching and research interests to: **Dr. Kay Tweeten, Department of Biology.** Position will remain open until filled, but for best consideration applications should be postmarked by June 22, 1994.

**The College of St. Catherine
2004 Randolph Avenue
St. Paul, MN 55105**

Equal Employment Opportunity/Affirmative Action.

POSITIONS OPEN

RESEARCH ASSISTANT PROFESSOR TRANSGENIC MOUSE FACILITY SUPERVISOR

The Division of Molecular Oncology of the Department of Genetics, University of Illinois at Chicago, seeks a Research Assistant Professor to establish and supervise a transgenic mouse facility. Excellent opportunities for collaborative and independent research on many novel genes involved in various phenotypes of malignant cells. Requires Ph.D. or equivalent degree, a minimum of two to three years of postdoctoral experience in generating and characterizing transgenic mice and a record of publications. Salary commensurate with experience. For fullest consideration, send application by June 24, 1994, including curriculum vitae, list of publications and names of three referees to: **Dr. Igor Roninson, Department of Genetics (M/C 669), University of Illinois at Chicago, 808 South Wood Street, Chicago, IL 60612-7309.** *Equal Opportunity/Affirmative Action Employer.*

PROFESSOR OF METALLOBIOCHEMISTRY and DIRECTOR, NEBRASKA CENTER OF METALLOBIOCHEMISTRY

University of Nebraska-Lincoln (UNL) seeks applications from leaders in the field of metallobiochemistry to fill a full Professor position and serve as Director for the Nebraska Center of Metallobiochemistry. Requires an active research program with an outstanding record of funding and publications in bioinorganic chemistry. Research focus will incorporate modern physical methods, molecular biology, and/or synthesis and study of inorganic model systems. Preference given to candidates whose research interests complement those of current faculty. Successful candidate will be member of the Center for Biological Chemistry with academic appointments in the Departments of Biochemistry (Institute of Agriculture and Natural Resources) and Chemistry (College of Arts and Sciences). This nine-month, academic-year appointment will play a key role in providing leadership for the Nebraska program in Metallobiochemistry taking the initiative to obtain traineeships, cooperative grants, center grants, and other activities to continue and strengthen the program. Review of applications will begin September 1, 1994, with an anticipated starting date of August 1, 1995. Submit letter of application, curriculum vitae, and names and addresses of references to: **Chair, Metallobiochemistry Search Committee, University of Nebraska-Lincoln, Department of Biochemistry, 206 Biochemistry Hall, Lincoln, NE 68583-0718; Telephone: 402/472-2932.** *UNL is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity and is responsive to the needs of dual-career couples. We assure reasonable accommodation under the Americans with Disabilities Act.*

PROFESSOR AND CHAIR OF CANCER RESEARCH

Oregon Health Sciences University invites applications and nominations for an endowed position as professor and chair of cancer research. Strong ties between the departments of Cell Biology and Anatomy, Molecular and Medical Genetics, Microbiology and Immunology, Molecular Biology and Biochemistry, Physiology, Pediatrics, Pathology, Medicine, and Surgery have facilitated the creation of the Oregon Cancer Center, the planning of which is funded by the National Cancer Institute. The only biomedical university in the state, Oregon Health Sciences University has active programs in clinical organ transplantation and is actively developing basic and clinical resources for a gene therapy program that will interface substantially with the Cancer Center and with the newly established Bone Marrow Transplant Program.

Candidates should have a distinguished record of internationally recognized basic or clinical research with a strong commitment to graduate and undergraduate education and translational research. The endowed chair is an exceptional opportunity to enhance significantly the cancer research programs at Oregon Health Sciences University. In order to be assured of full consideration, applications should be received by August 1, 1994.

Letters of application, curriculum vitae, and names of at least four references should be sent to:

**Grover C. Bagby, Jr., M.D.
Professor of Medicine and
Molecular & Medical Genetics
Oregon Health Sciences University—L580
3181 S. W. Sam Jackson Park Road
Portland, OR 97201**

POSITIONS OPEN

MOLECULAR BIOLOGIST—ASSISTANT PROFESSOR, tenure-track, fall 1995, to teach Molecular Biology, Microbiology and participate in Introductory Biology. Ph.D. required.

Applicants must demonstrate excellence in undergraduate teaching and research involving undergraduates, including publication. Experience in small college setting desirable.

Ursinus is northwest of Philadelphia in suburban setting and is highly selective, residential, co-ed, liberal arts college of 1150 students with long tradition of strength in sciences.

Send letter of application and curriculum vitae to: **Dr. Ellen M. Dawley, Department of Biology, Ursinus College, P.O. Box 1000, Collegeville, PA 19426-1000.** Position to be filled when suitable candidate is found. *Ursinus is Equal Opportunity Employer/Affirmative Action.*

DIRECTOR OF AUTOPSY SERVICE at UCSD Medical Center with Participation in Neuropathology Service. Effective July 1, 1995, although exact start date is negotiable.

The Department of Pathology of the University of California, San Diego (UCSD), seeks a Director of the Autopsy Service of UCSD Medical Center who will also participate in its Neuropathology Service. Faculty appointment will either be tenured or tenure-track. Applicants must possess the M.D. degree, be certified or eligible for certification in Anatomic Pathology or in Combined Anatomic and Clinical Pathology (American Board of Pathology), and possess or be able to obtain a State of California medical license. Prior experience in academic pathology and subspecialty certification or eligibility in Neuropathology are desirable. In addition to the service responsibilities associated with the position, the applicant will be expected to teach medical students, residents, and fellows and to establish a program of scholarly investigation appropriate for a tenured or tenure-track appointment. Academic rank and salary will be commensurate with the qualification and experience of the successful candidate and will be consistent with established UCSD pay scales. Closing date for applications is July 29, 1994. Applicants should submit curriculum vitae and list of five references to: **University of California, San Diego, Henry C. Powell, M.D., Professor and Head of the Division of Anatomic and Neuropathology, Department of Pathology, UCSD School of Medicine, 9500 Gilman Drive, La Jolla, CA 92093-0612.** *UCSD is an Equal Opportunity/Affirmative Action Employer.*

EBERTY CHAIR PROFESSOR AND ASSISTANT PROFESSOR IN STRUCTURAL BIOLOGY CARNEGIE MELLON UNIVERSITY

The Department of Biological Sciences at Carnegie Mellon University is expanding its activities in Structural Biology. We are looking for (1) a senior internationally recognized structural biologist with a vigorous, outstanding research program who will hold the Robert E. Eberly Chair in Structural Biology; and (2) a tenure-track assistant professor for a promising individual who is ready to begin a vigorous, independent research career. In both cases, investigators using multidimensional NMR, X-ray crystallography, and/or computational tools to solve significant problems in structural biology are encouraged to apply. Carnegie Mellon University has existing strengths in NMR and high-speed computational approaches to structural biology. Currently, in addition to the planned growth in structural biology, there is growth in the Departments of Biological Sciences and Chemistry in the areas of cell biology, bio-inorganic, and bio-organic chemistry.

Carnegie Mellon University invites nominations and applications for these two faculty openings. Candidates should send curriculum vitae and a brief description of their research interests. Candidates for the junior position should include names of three references. Reviews of applications will begin on August 1, 1994, and will continue until suitable candidates are recruited. All correspondence should be sent to:

**Chair of the Structural Biology Search Committee
Department of Biological Sciences
Carnegie Mellon University
4400 Fifth Avenue
Pittsburgh, PA 15213-2683**

Carnegie Mellon University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

DIRECTOR, UCR/UCLA PROGRAM IN BIOMEDICAL SCIENCES DIVISION OF BIOMEDICAL SCIENCES UNIVERSITY OF CALIFORNIA, RIVERSIDE (UCR)

Responsible for leadership of the research and educational activities of the Division of Biomedical Sciences at UCR. Duties include leadership of and active participation in the research activities of the Divisional faculty at UCR and the Ph.D. program in Biomedical Sciences; supervision of an accelerated 7-year educational program leading to the B.S. degree from UCR and the M.D. degree from the UCLA School of Medicine; serving as Chairperson of the Division of Biomedical Sciences (15 ladder-rank faculty positions in basic Medical Sciences disciplines at UCR and seven adjunct positions at the associated Harbor/UCLA Medical Center teaching facility); and maintaining liaison among UCR, UCLA, Harbor/UCLA Medical Center, the UC Office of the President, and other applicable state and national agencies. Requires: (a) Ph.D. or M.D. degree; (b) a strong and active research program in biomedical sciences; (c) familiarity with medical school basic sciences instruction; (d) evidence of success in managing strong academic programs; (e) qualification for appointment as a Full Professor in the University of California system. Starting date: July 1, 1995.

Please send nominations or letter of application, résumé and names of at least three references by August 15, 1994, to: **BMSF Program Director Search Committee, Division of Biomedical Sciences, University of California, Riverside, CA 92521-0121.**

The University of California is an Equal Opportunity/Affirmative Action Employer.

HEAD, DIVISION OF INFECTIOUS DISEASES DEPARTMENT OF MEDICINE UNIVERSITY OF BRITISH COLUMBIA

The University of British Columbia invites applications for an academic position as Head of the Division of Infectious Diseases in the Department of Medicine.

The successful candidate will have an FRCP or equivalent in Infectious Disease, a strong academic background, solid administrative experience, and a distinguished record in research and teaching. Credentials should be in keeping with an appointment at the Professor or Associate Professor level.

This is a tenure-track position beginning July 1, 1995. Please submit a letter of application and curriculum vitae no later than September 1, 1994, to: **Dr. G. B. J. Mancini, Eric W. Hamber Professor and Head, Department of Medicine, University of British Columbia, Vancouver Hospital and Health Sciences Center, 910 West 10th Avenue, Vancouver, BC V5Z 4E3.** Salary will be commensurate with experience.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. UBC welcomes all qualified applicants, especially women, aboriginal people, visible minorities and persons with disabilities.

ACADEMIC COORDINATOR I/ HERBARIUM CURATOR

The University of California at Davis invites applications for an Academic Coordinator I and curator for the U.C. Davis Herbaria. This is a full-time academic position in the Division of Biological Sciences. A Ph.D. is required. Candidate must have a strong background in plant systematics and experience with herbarium curation, including management of facilities and exchange with other herbaria. An ability to identify plants in the seedling or vegetative stage and from fragmentary material will be required. Successful candidate will be expected to teach one course per year in plant identification and systematics of the California flora.

Candidates should submit curriculum vitae, a statement of interest; a statement of teaching and curatorial experience, and names and addresses of three references by June 15, 1994, to: **Dr. Marcel Rejmánek, Chair, Search Committee, Section of Plant Biology, Division of Biological Sciences, University of California, Davis, CA 95616.** *The University of California, Davis, is interested in candidates who are committed to the highest standards of scholarship and professional activities, and to the development of a campus climate that supports equality and respect for differences based on gender, cultural ethnicity, level of disability, and sexual orientation. The University of California is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

DIRECTOR OF BASIC OPHTHALMIC RESEARCH with faculty appointment at level of Associate Professor, with extensive experience in molecular biology and immunology of cataract and other ocular diseases is sought to head a basic, multidisciplinary research and postgraduate research fellowship program in the Center for Ophthalmic Research at the Brigham and Women's Hospital. Requirements include Ph.D., several years of experience in molecular biology and immunology applied to studies of ocular diseases, demonstrated ability as teacher, mentor and administrator, and success in competing for federal, private, and industrial research funding. The successful candidate will be expected to carry on his/her own independent research activities. Excellent basic and clinical research facilities are available. *Harvard University and Brigham and Women's Hospital are committed to increased representation of women and members of minority groups on faculty and particularly encourage applications from such candidates.* Please send curriculum vitae and three referees prior to July 1, 1994, to: **Leo T. Chylack, Jr., M.D., Professor and Chief of Ophthalmology, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115.**

GROUP LEADER POSITION

The **Max-Delbrück-Laboratorium in der Max-Planck-Gesellschaft** as part of the **Zentrum für molekulare Gen- und Zelltechnologie Köln** invites applications from scientists for a five-year **GROUP LEADER POSITION**.

The successful candidate will have the opportunity to establish an independent research group. Emphasis will be placed on molecular investigations in the following fields: *Arabidopsis Genome, Signal Transduction, Yeast as a Model for Eukaryotes, Mycorrhizae, Plant Taxonomy and Ecology, Parasitology in Animals and Genetics of Complex Systems.*

The holder of the position is expected to participate in the university's teaching program. The Max-Delbrück-Laboratorium benefits from the excellent central facilities of the Max-Planck-Institut für Züchtungsforschung.

Further details may be obtained from **Dr. C. Meyer, Telephone: D-(0221) 50 62-500, Telefax: D-(0221) 50 62-513** or from **Prof. Dr. Walter Doerfler, Telephone: D-(0221) 470-2386, Telefax: D-(0221) 470-5170.** Applications should be sent by September 20, 1994, to the same addresses.

ENVIRONMENTAL GEOLOGIST/ECOLOGIST. Anticipated **TENURE-TRACK POSITION** beginning August 15, 1994. The successful candidate must have academic training/experience in groundwater and bioremediation. Teaching general education science courses emphasizing biological and/or geological principles expected. Ph.D. required. Send curriculum vitae, all transcripts, and three letters of recommendation to: **G. L. Kuhnhen, Department of Geology, Eastern Kentucky University, Richmond, KY 40475-3129** by June 30, 1994. *Eastern Kentucky University is an Equal Opportunity/Affirmative Action Employer. Employment eligibility verification required, Immigration Reform and Control Act of 1986.*

PHARMACOLOGIST

Applications are invited for a full-time **FACULTY POSITION** comprising both teaching and research opportunities. Candidates should have a Ph.D. in pharmacology and expertise in human physiology. Candidates should possess a strong commitment to teaching and research. Send curriculum vitae to:

**Douglas H. Poorman, Ph.D.
Vice President of Academic Affairs
Southern College of Optometry
1245 Madison Avenue
Memphis, TN 38104
Equal Opportunity Employer.**

POSTDOCTORAL POSITION available immediately to perform structure-function studies on proteins involved in the actin cytoskeleton. Applicant with experience in molecular and/or cell biology is sought to complement our strengths in protein chemistry, signal transduction and X-ray crystallography. Send curriculum vitae and two letters to: **Steven C. Almo, Department of Biochemistry, or John Condeelis, Department of Anatomy and Structural Biology, Albert Einstein College of Medicine, 1300 Morris Park Avenue, Bronx, NY 10461. FAX: 718-892-0703.** *Affirmative Action/Equal Opportunity Employer.*

Postdoctoral Opportunities In The Biomedical Sciences.

Listed below are a few of the outstanding opportunities for conducting research that are now available with leading scientists at the National Institutes of Health.

Cell Biology and Signal Transduction

James T. Russell, PhD

Fluorescence microscopy and video image processing are used to measure cytoplasmic calcium signals in neurons and glial cells. Problems under analysis concern glial cell signaling and neuronal-glial interactions with particular reference to long distance glial signaling. Applicants should have a background in cell biology of intracellular calcium signaling mechanisms and have less than five years postdoctoral experience. Knowledge of electrophysiological methods preferred. Laboratory of Cellular and Molecular Neurophysiology (OE-46), NICHD, Building 49, Room 5A30.

Cell Cycle and Chromatin Assembly

Michael Bustin, PhD

The relationship between the cell cycle and the assembly of the chromatin structure of transcriptionally active genes is being investigated. Cell-free assembly systems, cells in tissue culture, and transgenic mice are used to study the generation of active chromatin and to investigate the cellular role and mechanism of action of defined chromosomal proteins. Recombinant DNA and immunochemical methods are then used to define functional domains in HMG proteins. Applicants should have less than five years postdoctoral experience. Laboratory of Molecular Carcinogenesis (OE-46), NCI, Building 37, Room 3D12.

Cell Cycle Studies in *E. coli*

Nancy J. Trun, PhD

The timing and spatial regulation of the *E. coli* cell cycle is being studied using novel diploid camphor resistant mutants. The mutants have defects in several parts of the cell cycle including initiation of DNA replication and chromosomal partitioning. Future studies will focus on the molecular, genetic and biochemical characterization of the mutants and suppressors of the mutants. Applicants should have less than five years postdoctoral experience. Laboratory of Molecular Biology, (OE-46), Building 37, Room 2D21.

Gene Expression and Cell Biology

Richard J. Maraia, MD

The regulation of Alu retrotransposed elements is being studied to better understand the impact of their expression on cell growth. Cloned factors which affect Alu RNA metabolism and regulation of re-initiation by RNA polymerase III are being characterized*. Experience in biochemistry and molecular biology, and less than five years postdoctoral experience, are required. Laboratory of Molecular Growth Regulation (OE-46), NICHD, Building 6, Room 416.

*See *Mol Cell Biol* 14:3949 and *Mol Cell Biol* 14:2147)

Immunology and Molecular Biology

Anna George, PhD

The regulation of immunoglobulin isotype switching to IgA by B cells, and patterns of cytokine secretion by T cells and accessory cells in mucosal and non-mucosal lymphoid organs are being

investigated. Applications are invited from candidates interested in submitting a proposal for a National Research Council Research Associateship, preferably by August 15. Candidates with experience in cell and molecular biology preferred. Laboratory of Immunology (OE-46), NIDR, Building 30, Room 322.

Molecular Biology of Drug Metabolizing Enzymes

Richard M. Philpot, PhD

The regulation, structure, function and role in human disease of drug-metabolizing enzymes, particularly the flavin-containing monooxygenases, are being investigated. Specific residues associated with flavin binding and stabilization, temperature sensitivity, ion effects, and catalysis are also being identified. Applicants should have experience in biochemistry and molecular biology and less than five years postdoctoral experience. Laboratory of Cellular and Molecular Pharmacology (OE-46), NIEHS, P.O. Box 12233, Mail Stop 19-08, Research Triangle Park, NC 27709.

Molecular Neurobiology and Virology

P.J. Brooks, PhD

Viral vector methodologies for gene transfer in the adult brain are being developed and utilized to study brain function, behavior, and psychiatric diseases, including alcoholism. Experience in virology and molecular biology, and less than five years postdoctoral experience, are required. Laboratory of Neurogenetics (OE-46), NIAAA, 12501 Washington Avenue, Rockville, MD 20852.

Additional Postdoctoral Fellowship Opportunities

For an on-line listing of additional postdoctoral openings you may access the NIH EDNET Bulletin Board's POSTDOC conference by Internet (wylber.cu.nih.gov) or via modem (1,3014022221 or 1,8003582221) with modem parameters set at "7,Even,1". When connected to NIH, type in "vt100" for terminal emulation, "F5E" for initial, and "AJL1" for account number.

The Postdoctoral Research Fellowship Opportunities catalog, which describes additional opportunities at the NIH, may be requested from the address below. An electronic version of the catalog may be accessed via the network-based (Internet) Gopher Information System. To access the NIH Gopher server, Gopher client software (available via anonymous ftp "boombox.micro.umn.edu") must be running on your computer and configured to point to "gopher.nih.gov" and port "70". Select *Grants and Research Information* to reveal the *NIH Office of Education* directory. Those interested in receiving information on other postdoctoral opportunities, clinical training opportunities, or accessing Gopher may contact the Office of Education, Building 10, Room 1C129. Phone: 301-496-2427.

To Apply

If you hold a graduate doctoral degree (e.g., PhD, MD/PhD) or a professional degree (e.g., MD, DO, DDS, or DVM) accompanied by previous laboratory research experience, and would like to be considered for one of these positions, please send a cover letter, *curriculum vitae*, bibliography, and statement of research interests to the address listed with each position. In addition, please arrange to have letters of recommendation sent from three scientists who can provide an evaluation of your qualifications.



National Institutes Of Health

9000 Rockville Pike, Bethesda, MD 20892

Equal Opportunity Employer

POSITIONS OPEN

FACULTY POSITION RESEARCH CENTER IN TAIWAN

The Laser Medicine Research Center, College of Medicine, National Taiwan University, is seeking qualified candidates for teaching staff (the position is professor, associate professor, assistant professor or lecturer, depending on the candidate's qualification).

Applicants must be R.O.C. citizens and should hold Ph.D. degree or Ph.D. with M.D. degree and must have experience with cancer biology research or molecular biology research related to laser (gynecologic cancer research is much more acceptable).

Any qualified candidate, please forward curriculum vitae, summary of current and past research activities and names of references to: **Song-Nan Chow, M.D., Ph.D., Professor, Department of Obstetrics & Gynecology, Director, Laser Medicine Research Center, College of Medicine, National Taiwan University, 1, Jen-Ai Road, Sec. 1, Taipei 10016, Taiwan. Telephone: 886-2-3123456, extension 2165, FAX: 886-2-3211683 or 886-2-3224795.**

RESEARCH FACULTY POSITIONS IN MOLECULAR ONCOLOGY

The Division of Molecular Oncology of the Department of Genetics, University of Illinois at Chicago, has openings for four Research Assistant Professors to serve as team leaders in a major program aimed at identification and characterization of gene complexes responsible for various essential characteristics of malignant cells. The program is based on a powerful new strategy for cloning mammalian genes (see *PNAS* 91, 3744, 1994). Each position requires Ph.D. or equivalent degree, a minimum of two years of relevant postdoctoral experience and a record of publications. Position 1 is to study tumor suppressors and genes responsible for sensitivity to antiestrogens and drugs in breast cancer; experience in mammary cell culture preferred. Position 2 is to study genes regulating normal and abnormal hemopoietic differentiation; experience with ES cells preferred. Position 3 is to study regulation of cell cycle and apoptosis; requires experience in DNA replication analysis. Position 4 is to supervise the cloning and sequencing core group; requires a minimum of five years of experience in DNA sequencing, PCR and mismatch detection assays. Salaries commensurate with experience. For fullest consideration, send applications by June 24, 1994, indicating position number for which you are applying and including curriculum vitae, list of publications and names of three referees to: **Dr. Igor Roninson, Department of Genetics, (M/C 669), University of Illinois at Chicago, 808 South Wood Street, Chicago, IL 60612-7309. Equal Opportunity/Affirmative Action Employer.**

Molecular Biology/Biotechnology: The Natural Science and Mathematics Department at Salem-Teikyo University seeks qualified applicants for two new **FACULTY POSITIONS** in a developing molecular biology/biotechnology program. Salem-Teikyo University is a unique university with a multi-cultural student body and a mission to educate global citizens. Applicants should have interest in transgenic plant research or biology of stress research. A doctorate in the field of instruction and research publication are required. Responsibilities include teaching, conducting and supervising research. Address applications with curriculum vitae and names of three references to: **Personnel Services Director, 223 West Main Street, Salem, WV 26426.** Search will continue until positions are filled. *Equal Opportunity Employer/Affirmative Action.*

POSTDOCTORAL POSITIONS CENTER FOR ENVIRONMENTAL MEDICINE

MOLECULAR TOXICOLOGY POSITION available immediately to study the molecular and biochemical mechanism of chemical carcinogens found in the environment. Emphasis is upon nongenotoxic carcinogens, apoptosis, cell proliferation and modulation of growth factors and protooncogenes.

BIOMARKERS FOR CANCER CHEMOPREVENTION POSITION available immediately to study and develop intermediate endpoints and molecular and biomarkers for carcinogenesis and chemoprevention models in laboratory animals. Applicants should send curriculum vitae and names of three references to: **Dr. Michael Pereira, Department of Pathology, Medical College of Ohio, 3000 Arlington Avenue, Toledo, OH 43614. FAX: 419/381-3066.**

POSITIONS OPEN

POSTDOCTORAL POSITION available to study protein-DNA interaction in Herpesvirus DNA replication and transcription, using viral ori-P as an example. Applicant should have a Ph.D. and strong background in molecular biology. Technical expertise in gene cloning and expression are prerequisites. Interested individuals should send curriculum vitae and name and addresses of three referees to: **Dr. Meihan Nonoyama, Tampa Bay Research Institute, 10900 Roosevelt Boulevard, St. Petersburg, FL 33716.**

POSTDOCTORAL POSITIONS available for recent Ph.D.'s to join an active multidisciplinary research group to study (i) transcriptional regulation of a novel protein growth factor and (ii) the receptor of the growth factor, including cloning and characterization of its regulatory mechanism. Successful applicants should hold a Ph.D. in molecular biology or biochemistry and have research experience in state-of-the-art molecular biology techniques such as expression cloning and library screening. Send curriculum vitae and names of three references to: **Dr. John C. Lee or Dr. Merle S. Olson, Department of Biochemistry, The University of Texas Health Science Center, San Antonio, TX 78284-7760.** Application deadline is June 30, 1994. *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION available anytime after July 1, 1994, in **synthetic organic/protein biochemistry** (Ribonucleotide Triphosphate Reductase); some background in enzymatic kinetics is also desirable. Send curriculum vitae, undergraduate and graduate transcripts, a firm start date, plus 3 letters of reference by the June 20, 1994, closing date. **Professor Richard G. Finke, Department of Chemistry, Colorado State University, Fort Collins, CO 80523.**

MOLECULAR BIOLOGISTS

POSTDOCTORAL POSITIONS: USDA, Agricultural Research Service, Research Associate positions available in groups exploring basic mechanisms in folliculogenesis/atresia (J. J. Ford), muscle growth/turnover (M. Koohmaraie) and disease resistance (C. W. Beattie) in cattle, swine and sheep. Candidates with training/experience in molecular biologic techniques are encouraged to apply. Excellent facilities and environment provide a unique opportunity in high priority ARS programs. Minimum starting salary \$34,662. *USDA-ARS is an Affirmative Action/Equal Opportunity Employer.* Please send curriculum vitae and names of three references to: **Craig W. Beattie, Ph.D., USDA-ARS, U.S. Meat Animal Research Center, Spur 18D, P.O. Box 166, Clay Center, NE 68933-0166.**

POSTDOCTORAL POSITION available to investigate synaptic transmission in the mammalian retinal slice preparation. The applicant should have a strong electrophysiological background and experience in whole cell patch clamp techniques. Send curriculum vitae, brief description of prior research and the names of three references to: **Peter D. Lukasiewicz, Ph.D., Department of Ophthalmology, Campus Box 8096, Washington University School of Medicine, St. Louis, MO 63110-1093. Affirmative Action and Equal Opportunity Employer, M/F/H/V.**

POSTDOCTORAL POSITION. Research involves enzyme mechanism and enzyme structure-function studies and requires experience in protein purification and characterization and recombinant DNA techniques. Send curriculum vitae, statement of research interests and experience, and the names and telephone numbers of three references to: **Dr. C. A. Caperelli, Division of Pharmacology and Medicinal Chemistry, College of Pharmacy, University of Cincinnati Medical Center, 3223 Eden Avenue, Cincinnati, OH 45267-0004.**

POSTDOCTORAL POSITION—The Mount Sinai Medical Center of New York. Join ongoing NIH-funded studies on active cation transport across membranes and its regulation by phosphorylation reactions and protein-protein interactions. A background in membrane biophysics/biochemistry is desirable. The successful candidate will have relevant experience and publications. Please submit curriculum vitae and names and telephone numbers of three references to: **M. Kircherberger, Ph.D., Department of Physiology/Biophysics, Box 1218, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574. An Equal Opportunity Employer.**

POSITIONS OPEN

POSTDOCTORAL POSITION

Available for Ph.D., M.D. or M.D./Ph.D. with interest in the application of molecular approaches to addressing questions in human aging, protein and energy metabolism. Unique environment with opportunity to conduct parallel studies in animals and humans. Proficiency in protein chemistry, RNA/DNA techniques, PCR and electrophoresis required. Experience with animals encouraged. Please send curriculum vitae, and names and complete addresses of 3 references to: **Naomi K. Fukagawa, M.D. Ph.D., The Rockefeller University, 1230 York Avenue, New York, NY 10021-6399; Telephone: (212) 327-7451, FAX: (212) 327-7453. RU is an Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITIONS IN DEVELOPMENTAL BIOLOGY

Positions available for research with **Dr. Hans Bode** (molecular basis of stem-cell differentiation and pattern in hydra), **Dr. Ralph Bradshaw** (polypeptide growth factors and intracellular protein translocation), **Dr. Marianne Bronner-Fraser** (role of extracellular matrix in neural crest migration and neural crest cell lineage), **Dr. Peter Bryant** (molecular genetics of tumor suppressor genes in *Drosophila*), **Dr. Susan Bryant** (molecular analysis of patterning in developing and regenerating limbs), **Dr. Ken Cho** (molecular biology of the embryonic organizer), **Dr. Edward Jones** (cerebral cortical and thalamic functions in sensory perception), **Dr. Herbert Killackey** (morphological organization and development of somatosensory cortex), **Dr. J. Lawrence Marsh** (molecular genetics of cell signalling events in *Drosophila* development; genetics and evolution of catecholamine producing enzymes in mammal and insects), **Dr. Ronald Meyer** (cellular regulation of nerve regeneration in adult rodents and fish using *in vitro* and *in vivo* models), **Dr. Ben Murray** (molecular and cellular biology of vertebrate cell-adhesion molecules and their roles in development), **Dr. Michael O'Connor** (regulation of homeotic gene expression and mechanisms of dorsal-ventral patterning in *Drosophila*), **Dr. Diane O'Dowd** (regulation of electrical excitability in the developing nervous system), **Dr. Richard Robertson** (development of cerebral cortex and its afferents), **Dr. Martin Smith** (development mechanisms underlying synaptic connections), or **John Wasmuth** (human molecular genetics). *Some positions (not all) require U.S. citizenship or permanent residency status and completion of all Ph.D. requirements before June 30, 1994. Submit résumé, description of research interests and the names and addresses of three referees to: Director, Developmental Biology Center, University of California, Irvine, CA 92717. Deadline for some positions 15 June 1994.*

University of California is an Equal Opportunity/Affirmative Action Employer committed to excellence through diversity.

ROYAL FREE HOSPITAL SCHOOL OF MEDICINE (UNIVERSITY OF LONDON)

Department of Neurosciences POSTDOCTORAL BIOCHEMIST

Applications are invited from postdoctoral biochemists to work on a 2-year MRC-funded project on the molecular basis of mitochondrial disease. Candidates should have experience in tissue culture, mammalian cell transfection techniques as well as the customary grounding in molecular biology and basic biochemical techniques.

Salary range: £18,855 to £22,070 plus £2134 London weighting per annum on the Range II scale.

Informal enquiries to: **Dr. A. Bodnar, Telephone: 071 794 0500 extension 4385.**

Job description available from the: **School Office, RF-HSM, Rowland Hill Street, London NW3 2PF (Telephone: 071-794 0500 extension 4262).** Applicants should send **THREE** copies of curriculum vitae together with full details of two referees to the above address. Closing date: 10 June 1994. Please quote reference no: **NEU/PDB/017.**

POSTDOCTORAL FELLOW—The Mount Sinai Medical Center of New York, Department of Medicine, Division of Endocrinology and Metabolism. Position available to study the molecular immunology of autoimmune thyroid disease. Busy, active laboratory with opportunity for independent work. *U.S. citizenship or permanent residence required.* Apply with curriculum vitae to: **Dr. Terry D. Davies, The Mount Sinai Medical Center, One Gustave L. Levy Place, New York, NY 10029-6574. An Equal Opportunity Employer.**



GENEMEDICINE, INC., an emerging leader in non-viral gene therapy, is developing novel gene medicines, comprised of DNA vectors and vector delivery systems, to treat a broad range of genetic and acquired diseases. The Company is backed by several of the most successful venture capital investors in biotechnology, has strong ties to the laboratories of its scientific founders at Baylor College of Medicine and at UCSF and is located close to the Texas Medical Center - the world's largest medical research facility.

GENEMEDICINE is expanding its research and development programs which, in collaboration with a major pharmaceutical company, include gene therapies for treating inflammatory diseases. We now seek to appoint successful and highly motivated scientists to the following positions:

Director: Exploratory Vector Delivery

We seek to appoint an accomplished scientist to lead a small group of biochemists and peptide chemists responsible for designing, synthesizing and testing novel systems for targeting genes *in vivo*. The successful candidate will have a Ph.D., at least four years of experience within a pharmaceutical/ biotechnology company and have managed a research group.

Scientists: Site-Specific Delivery of Macromolecules

We seek five Ph.D.-level scientists who will be responsible for applying peptide and carbohydrate chemistry to develop technologies for enhancing the cell recognition, entry and processing of DNA expression vectors. Post-doctoral training and evidence of productivity in this area are required.

Scientists: Intracellular Trafficking

We seek both a Ph.D.-level scientist and a fixed-term post-doctoral fellow with at least two years of experience, to work on vesicular trafficking and/or antigen processing. These scientists will determine the cell entry and trafficking of genes. One of the successful candidates will have experience in immunology and the other in the use of electron and confocal microscopy for studying cell trafficking.

Scientist: Pharmacokinetics-Pharmacodynamics

We seek a Ph.D.-level scientist with at least two years of post-Ph.D. experience in the development and application of pharmacokinetic models and the pharmacodynamics of recombinant proteins. Experience in a biotechnology company is desired. This person will be responsible for determining the PK/PD of administered genes and their gene products.

Scientists: Mammalian DNA Expression Vectors and Immune-Cell-Specific Gene Regulation

We seek two Ph.D.-level scientists with at least two years of molecular biology experience who will be responsible for identifying and defining promoters and enhancers that function in human lymphocytes and mononuclear cells.

Scientists: Drug-Controlled Gene Therapy

We seek two Ph.D.-level scientists having at least two years of molecular biology experience to be responsible for a collaborative program with Baylor College of Medicine to develop a gene switch for gene therapy that utilizes steroid-responsive elements and transactivating proteins to control the *in vivo* expression of administered genes.

Scientists: Pharmacology and Animal Models

We seek four Ph.D.-level scientists and one B.S./M.S.-level scientist, each with at least three years of experience, to be responsible for establishing animal models of inflammation, peripheral neuropathy and hemophilia. This group will also be responsible for the evaluation of the pharmacology of novel gene therapy systems.

Histologist

We seek a B.S.-level certified Histologist, Histologist Technician (HT) or a Histotechnologist (HTL), with at least two years of post-training molecular biology experience, to be responsible for preparing conventional fixed and frozen sections, performing histological tests (including *in situ* hybridization and histochemistry) and to further develop the Company's histology program.

Scientist: DNA Purification

We seek a Ph.D.-level scientist with experience in biochemistry, molecular biology (specifically nucleic acid, oligonucleotide, protein or plasmid purification) or a related field, to develop novel methods for preparing and purifying plasmid DNA.

We offer highly competitive compensation packages. For confidential consideration, please send your CV to: GENEMEDICINE, INC., Human Resources, Ref. 694, 8080 North Stadium Drive, Suite 2100, Houston, TX 77054.

GENEMEDICINE, INC.

POSITIONS OPEN

POSTDOCTORAL POSITION MOLECULAR GENETICS

A postdoctoral position is available to study the molecular genetics of inherited breast cancer. This project focuses on the identification of breast cancer susceptibility genes and the subsequent mutational and functional analyses of these genes. Experience in molecular biology required. Preference will be given to candidates with experience in molecular cloning, sequencing and/or mutation analysis. Send curriculum vitae, description of past experience and names and addresses of three references to: **Barbara L. Weber, M.D., Departments of Medicine and Genetics, University of Pennsylvania, 7 Silverstein, 3400 Spruce Street, Philadelphia, PA 19104. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL (RESEARCH SCIENTIST) POSITION IN NEUROSCIENCE. NIH-funded position immediately open to study the electrophysiological properties of vestibular sensory neurons in chick brain slices and immunocytochemical studies on vestibular synapses using intracellular recording, dye injection, pharmacology, and immunocytochemistry. Experience in electrophysiology preferred. Ph.D. or M.D. required.

Please send curriculum vitae, statement of research interests and 3 references to: **Dr. K.D. Peusner, Department of Anatomy and Neuroscience Program, George Washington University School of Medicine, 2300 I Street N.W., Washington, DC 20037.**

The George Washington University is an Affirmative Action/Equal Opportunity Employer.

TWO POSTDOCTORAL POSITIONS Molecular Pharmacology of Malaria

NIH-funded positions are available to study the mechanisms of action of novel antimalarial agents directed at pyrimidine metabolism in *Plasmodium falciparum*. Expertise in enzymology (purification, kinetics, mechanisms of inhibition), in immunochemistry (conjugation chemistry, fusion proteins, monoclonal antibodies), or in recombinant technology (expression of toxic proteins) is highly desirable. Send an application including three references to: **Dr. Pradip Rathod, Institute for Biomolecular Studies, Department of Biology, The Catholic University of America, Washington, DC 20064. Equal Opportunity Employer.**

POSTDOCTORAL POSITION beginning September 1994 to develop new fluorescent dyes for labeling nucleic acids and to participate in the development of novel DNA separation and detection techniques for the Human Genome Project. Successful applicants will participate in a collaborative research effort with **Drs. A.N. Glazer and R.A. Mathies** in the Departments of Chemistry and Molecular and Cell Biology. Experience in synthetic organic chemistry is required; physical biochemistry and spectroscopy desirable. Send résumé and three references by July 1, 1994, to: **Dr. Richard A. Mathies, Department of Chemistry, University of California, Berkeley, CA 94720. The University of California is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION AVAILABLE Isolation of Genes Responsible for Human Developmental Malformations

The focus of my laboratory is to study human development at the molecular level. Positional cloning techniques are being used to isolate genes responsible for human birth defects. The mechanism of action of these genes will subsequently be explored. Send curriculum vitae and 3 letters of recommendation to: **James P. Evans, Ph.D., M.D., Program in Molecular Biology and Biotechnology, CB#7100, University of North Carolina, Chapel Hill, NC 27599. Telephone: (919) 962-8920. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL FELLOWSHIPS available immediately, using yeast to study (1) *in vivo* effects of mutations in ribosomal RNA (see *EMBO J.* 13:906), or (2) host genes influencing the rate and integration sites of the retrotransposon, *Ty1* (see *Genetics* 133:499). Send curriculum vitae with names of 3 references to: **Susan Liebman, Department of Biological Sciences, University of Illinois at Chicago, 845 West Taylor Street, Chicago, IL 60607-7060; FAX: 312-413-2691; Telephone: 312-996-4662; E-mail: U34824@UICVM.UIC.EDU. An Equal Opportunity Employer.**

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIP

Position available to study the regulation of gene expression by steroid hormones in the uterus during pregnancy in mammals. Experience in molecular biology, such as isolation of messenger RNA from tissue, Southern blots, Northern blots, PCR, and gene transfection, is required. Send curriculum vitae and names and addresses of three references to: **Dr. Indrani Bagchi, The Population Council, Center for Biomedical Research, 1230 York Avenue, New York, NY 10021.**

POSTDOCTORAL FELLOW TWO POSITIONS AVAILABLE (RESEARCH) DEPARTMENT OF NEUROLOGY UNIVERSITY OF MIAMI SCHOOL OF MEDICINE

Individual needed to study: the cytochemical organization and histopathology of the cerebral cortex in non-human primates and in patients with Alzheimer's disease and related conditions.

Individual needed to study: the histopathology of naturally occurring and genetically engineered animal models of human aging and neurodegenerative disorders.

Candidates should have experience in at least one of the following: anatomy of the cerebral cortex, neurohistology, neurohistopathology, *in situ* hybridization, immunocytochemistry and molecular biological techniques for the study of the nervous system. Send curriculum vitae and three letters of references to: **R.O. Kuljis, M.D., Director, Division of Behavioral Neurology/Department of Neurology, 1150 N.W. 14 Street, Suite 701, Miami, FL 33136. Equal Opportunity Employer/Affirmative Action.**

POSTDOCTORAL FELLOWSHIP/ ASSOCIATESHIP IN CHEMISTRY OR BIOLOGY OF POLYPEPTIDE HORMONES (2 or 3 years), STARTING SUMMER 1994

Opportunities for Ph.D.'s in interdisciplinary group studying peptides and glycopeptides of pituitary or other tissues, using HPLC, gas phase microsequencing, solid-phase or recombinant peptide synthesis, carbohydrate chemistry, RIA/ELISA/IRMA, bioassay, to isolate, identify, synthesize, measure and characterize the biologic function of known/unknown pituitary (or other) peptides. Stipend: \$50,000 to \$85,000 plus relocation expenses. Send curriculum vitae and 3 references to: **Dr. A. F. Parlow, Harbor-UCLA Medical Center, 1000 West Carson Street, Torrance, CA 90509.**

POSTDOCTORAL FELLOW—The Mount Sinai Medical Center of New York. A postdoctoral fellowship position is available for an individual with a doctorate degree in physical sciences or engineering. Experience in Magnetic Resonance Imaging and/or Magnetic Resonance Spectroscopy is desirable. The candidate will provide technical and research support and participate in various research projects being developed in the department. Opportunity to be trained and participate in the quality assurance aspects of Diagnostic Radiology Department exists for the suitable candidate. Please send curriculum vitae to: **Dr. J. G. Rabinowitz, Department of Radiology, Box 1234, The Mount Sinai Medical Center, One Gustave L. Levy Place, New York, NY 10029-6574. An Equal Opportunity Employer.**

POSTDOCTORAL RESEARCH POSITION

Available September 1994 to participate in studies of sub-lethal effects of metals on reproductive physiology of reptiles, amphibians and fish inhabiting coal fly-ash basin areas. A doctoral degree in zoology or biology is required. Applicants also should have a demonstrated interest in reproductive physiology and endocrinology, a commitment to publishing, field experience, and be familiar with computer programs and programming. Salary is \$29,000 for one year with the possibility of being renewed for a second year. *Applicants must be of United States citizenship.* Applications should be received by 30 June 1994. Send curriculum vitae, reprints, the names, telephone numbers and addresses of three references, and a one-page statement of research experience to: **Dr. Justin Congdon, Savannah River Ecology Laboratory, Drawer E, Aiken, SC 29802 USA.**

The Savannah River Ecology Laboratory is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

LIPOPROTEIN AND ATHEROSCLEROSIS RESEARCH PROGRAM

POSTDOCTORAL FELLOWSHIPS available in the areas of molecular and cellular biology of lipoprotein metabolism and atherosclerosis. Training faculty includes: **Edward Rubin, M.D., Ph.D.**, creation of transgenic mice, which are employed in studying human lipoprotein metabolism; **Trudy M. Forte, Ph.D.**, study normal and mutant apolipoproteins and their ability to mediate signal transduction and stimulate cholesterol efflux; **Ronald Krauss, M.D.**, metabolic and genetic factors affecting atherogenic lipoproteins in humans; **Lester Packer, Ph.D.**, studies on free radical toxicity and antioxidants in membranes, lipoproteins and myocardial ischemia; **Mohandas Narla, Ph.D.**, molecular biology approaches to studying protein and lipid organization in normal and pathologic red cells. Candidates with a strong background in molecular biology, molecular genetics, cell biology, biochemistry or pharmacology are preferred. Candidates should have a Ph.D., M.D. or equivalent and must be a citizen or permanent resident. Stipends start at \$26,000. Send curriculum vitae and names of three references to: **Ms. Gail Mosley, Administrative Assistant, Life Sciences Division, M/S Donner, Lawrence Berkeley Laboratory, One Cyclotron Road, Berkeley, CA 94720. Women and minorities are encouraged to apply. Equal Opportunity/Affirmative Action Employer.**



LAWRENCE
BERKELEY
LABORATORY

POSTDOCTORAL RESEARCH FELLOW (INSERM and Collège de France, Paris)

Position immediately available for up to three years, to study **neurosteroid** production, receptors and action. Experience in molecular biology is essential, (but experience in steroid hormones or neurobiology is not required). The candidate should not have French nationality and should not have resided in France for more than the last 12 months. Please send curriculum vitae and name of referee(s) to: **Etienne Emile Baulieu, INSERM U33, 80 Rue du Général Leclerc, 94276 Kremlin Bicêtre Cedex, France; FAX: 33.1.45.21.19.40.**

RESEARCH ASSOCIATE

Protein biochemist wanted to work in a group exploring oxidant stress and the regulation of antioxidant enzyme gene expression. Experience in protein purification, characterization, and immunoassay is required. Send curriculum vitae, reprints, and three references to: **Donald Massaro, M.D., Lung Biology Laboratory, Georgetown University Medical Center, 3900 Reservoir Road, NW, Washington, DC; FAX: 202-687-8538. Georgetown University is an Equal Opportunity/Affirmative Action Employer.**

EPIGENETIC CONTROL OF GENE EXPRESSION IN PLANTS

A POSTDOCTORAL RESEARCH POSITION is available immediately to study on the genetic, molecular, and biochemical level how genes become epigenetically modified during plant reproduction and development. Particular emphasis is placed on allelic variants of genomic imprinting (*PNAS* 91:4867, 1994) and epimutation (*GENETICS* 136:1121, 1994) of regulatory genes in maize.

Applicants should have research experience in plant genetics and molecular biology. Send curriculum vitae and a cover letter detailing experience and have three letters of recommendation sent to: **Dr. Joachim Messing, Waksman Institute, Rutgers University, P.O. Box 759, Piscataway, NJ 08855-0759. Rutgers University is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL RESEARCH POSITION DEPARTMENT OF ONCOLOGY, MCGILL UNIVERSITY

Position involves development and bioassay of polymeric delivery systems for radio/chemosensitizing drugs. This is an interdisciplinary project that will be of interest to a flexible individual with a background of polymer chemistry, pharmacokinetics and/or tumor/radiobiology. Send letter describing background and interests, curriculum vitae, and names of 3 referees to: **Dr. Shirley Lehnert, Radiation Oncology, Montreal General Hospital, 1650 Cedar Avenue, Montreal, Quebec, CANADA, H3G 1A4 or FAX: (514) 934-8220.**

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**NEW COMPUTING
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July 15, 16, 17, 1994

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Pfizer is a Fortune 100 leader in pharmaceutical research and health care products. Currently, the Department of Drug Safety Evaluation at our Central Research facility in Groton, Connecticut has a need for two dedicated professionals to join our cutting-edge team.

TOXICOLOGY

Bioanalytical Chemist/Biochemical Toxicologist

In this key assignment, you'll use HPLC, GC-MS, capillary electrophoresis and other analytical methods to investigate mechanisms of chemical-induced toxicity. To succeed, you'll need a BS/MS in a biological science, enhanced by training in Analytical Chemistry and at least 4-8 years' experience in analytical methods development. Hands-on experience in the above-referenced analytical methods is also desired.

Acute Toxicologist

Take on the challenges of development, validation and implementation of emerging *in vitro* and/or *in vivo* methods for the assessment of acute toxicity via various routes of exposure. To qualify, you'll need a degree in toxicology, pharmacology, a biological science, or the equivalent, supported by at least 3-5 years of laboratory experience with methods development in a research setting. Position also involves participation in ongoing laboratory operations.

In addition to a stimulating research environment, we offer fully competitive compensation and superior benefits, including generous relocation assistance to our desirable southeastern Connecticut shoreline community. For immediate consideration, please forward your resume to: **Dr. Ken E. Harewood, Manager, Employee Resources, Pfizer Inc, Central Research Division, Eastern Point Road, Groton, CT 06340.** We are an equal opportunity employer.



Central Research
We're part of the cure.

B I O M E D I C A L D E V I C E S

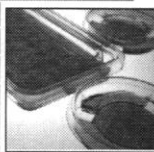


GOAL: COMMERCIALIZATION

Collagen Tendon

Organogenesis is dedicated to applying

the science of tissue engineering to the challenge of repairing the human body. Our first product, for the treatment of venous ulcers, is progressing successfully through human clinical trials. Focused on product development in wound care, vascular biology, orthopedics and urology, we're tapping into a growing multi-billion dollar marketplace. As we continue to capitalize on the extensive opportunity, we're adding new talent to our team:



Graftskin

STAFF SCIENTIST - VASCULAR BIOLOGY

The Vascular Biology program, a development stage effort, is seeking candidates who have experience with application of biological insights to biomaterials/tissue interaction issues. The ideal candidate will have a working knowledge of biological processes, cell biology, biomaterial pathology as well as an understanding of engineering principles. Experience in vascular or materials research projects would be considered very desirable.

With a strong presence in the biotechnology industry and a state-of-the-art environment, you should be prepared to meet all the challenges we offer. A competitive compensation and benefit plan, including stock options will be extended. Reach your professional goals by sending your resume to: **Human Resources Manager, ORGANOGENESIS, 150 Dan Road, Canton, MA 02021.** We are an Equal Opportunity Employer.



ORGANOGENESIS INC.

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SCIENTIST

Molecular Virology and Host Defense

SmithKline Beecham Pharmaceuticals, a worldwide leader in the healthcare industry, has an excellent opportunity for a Scientist to join its Department of Molecular Virology and Host Defense.

The selected individual will carry out drug discovery research on antivirals for human pathogens, particularly herpes viruses, hepatitis viruses and HIV. Other responsibilities include applying microbiological and molecular techniques to the analysis of potential antiviral compounds, their mechanism of action and the regulation of viral genes. The selected candidate must also have the ability to isolate and characterize new virus strains and assay viral infectivity and gene expression in cell cultures.

Qualifications include a B.S. in Microbiology with 3-6 years of experience in virology or an M.S. with at least one year of experience in virology. Knowledge of nucleic acid and/or protein analysis methods and experience with cell culture and viral culture required. Must have experience with biosafety level 2 procedures, experience with biosafety level 3 procedures desirable.

Located in our state-of-the-art research facility in suburban Philadelphia, SmithKline Beecham offers a competitive compensation and benefits package. Interested applicants should send resume with salary history to: **SmithKline Beecham Pharmaceuticals, P.O. Box 401, #H0067, Conshohocken, PA 19428.** We are an Equal Opportunity Employer, M/F/D/V.



SmithKline Beecham
Pharmaceuticals

Challenging the natural limits.

**The Mind Science Foundation of San Antonio, Texas
announces the
Scientist/Scholar-in-Residence Program**

Call for Nominations

The Mind Science Foundation is a not-for-profit operating foundation located in San Antonio, Texas. This 35-year-old foundation is dedicated to supporting mind related research and educational programs about the human mind.

Nominations are being accepted for the Scientist/Scholar-in-Residence Program of MSF which will commence in the fall of 1995. The program offers a stipend to insure full salary support for a period of up to 12 months on site at MSF in San Antonio, Texas. Housing to accommodate scientists/scholars and their families and complete secretarial, editorial, computer and statistical support will be provided. The successful candidate will be able to interact with leading scientists at nearby universities and research institutions in a physical environment that is agreeable year round.

Candidates should be nominated by eminent scientists, scholars, and academic administrators. The scientist/scholar will be selected for exceptional accomplishment in his/her field, which must relate to study of mind/brain function in human subjects or animal models. The nominee must submit the plans for an innovative project for the time in residence at the Mind Science Foundation.

This program has been established to provide an opportunity for scholars and scientists to concentrate on a particular project in an environment away from the normal routines and responsibilities of the home institution.

Deadline for Nominations is October 1, 1994



For details about the Mind Science Foundation Scientist/Scholar-in-Residence Program, please contact: Catherine Nixon Houston, Executive Director/The Mind Science Foundation 7979 Broadway, Suite 100/San Antonio, Texas 78209/(210) 821-6094 or FAX (210) 821-6199.

genzyme

Moving forward. With a commitment to the development of new technologies and the resources required for success, Genzyme has become a major, diversified health care products company.

Making progress. In an environment that supports initiative and innovation, our world-class research teams continue to make substantial scientific and clinical progress in all of our major programs.



**STRUCTURAL
PROTEIN CHEMIST**

Framingham, MA

We are seeking a protein chemist to work on the characterization of recombinant and transgenic proteins. The ideal candidate holds a PhD in Protein Chemistry with 2-5 years' postdoctoral experience in structural protein chemistry with particular emphasis on post translational modifications and the effect on protein structure and function. Strong analytical techniques and experience in mass spectrometry, HPLC, or capillary electrophoresis are preferred.

Genzyme rewards success with an excellent compensation and benefits package, including 3 weeks' paid vacation, a 401(k) plan with a company match, extensive insurance benefits and an Employee Stock Purchase Plan. Send resumes to: Genzyme Corporation, Human Resources Department, Code PK, One Mountain Rd, Framingham, MA 01701. An equal opportunity employer.

**ADVANCING HEALTHCARE PRODUCTS
AND SERVICES WORLDWIDE**

**TECHNICAL ENTREPRENEURS
Together, We Will Make It Happen**

Michigan Biotechnology Institute (MBI) is a private, tax-exempt research and business development organization that specializes in industrial and environmental biotechnology. Grand River Technologies (GRT), our business development subsidiary, finds appropriate commercial outlets for viable technologies. MBI's incubator subsidiary, Bio-Business Incubator of Michigan, provides space and support services so entrepreneurial firms can get their footing and eventually exit to their own facilities. We are currently seeking innovative bio-based technologies and their champions in the following areas:

- Industrial and Chiral Chemicals
- Agricultural Biochemicals
- Food Ingredients
- Biomaterials
- Waste Treatment and Bioremediation

Our unique resources and commitment to the creation of new businesses will support you with:

- A state-of-the-art research and development facility
- Skilled business leadership
- Top-notch scientific and engineering staff
- Access to a 20,000 square-foot pilot plant

In return, you'll be expected to lead the effort in raising funds to fuel the program. You may join MBI as an employee, bring your existing business to our business "incubator" or find a new strategic alliance through GRT.



The next step: tell us why you're the right entrepreneur for us. Send a concise, non-confidential summary of your technology including ownership, your commercialization plan and your resume to:

**Dr. J. Gregory Zeikus
President and CEO
Michigan Biotechnology Institute
P.O. Box 27609 • Lansing, MI 48909**

MBI is an equal opportunity employer/institute.

**ASSISTANT PROFESSOR
DEPARTMENT OF PHYSIOLOGY
EAST TENNESSEE STATE
UNIVERSITY
JAMES H. QUILLEN COLLEGE
OF MEDICINE**

Tenure-track position at the Assistant Professor level is to begin July 1994, contingent upon state funds. Applicant must have a doctoral degree with extensive training in physiology and have two or more years of postdoctoral experience. Potential to develop and sustain a fundable, independent research program will be an important selection criteria. Area of expertise is open, but currently the department has six faculty members whose interests represent a wide range of cellular and systems oriented research in the physiological sciences. There are opportunities for collaboration throughout the department and college with research groups interested in cell biology of the vascular wall, neuroscience, membrane transport, electrophysiology, cardiovascular control, and cell and molecular biology. East Tennessee State University, James H. Quillen College of Medicine, provides a growing research community, ample start-up funds, modest teaching loads, and a beautiful physical location. Candidates should submit a letter, curriculum vitae, names of three references, and a brief research prospectus to Dr. William L. Joyner, Professor and Chair, Department of Physiology, James H. Quillen College of Medicine, East Tennessee State University, P.O. Box 70,576, Johnson City, TN 37614-0576.

East Tennessee State University is an Affirmative Action/Equal Opportunity Employer.

IMPROVING THE QUALITY OF LIFE THROUGH ADVANCES IN R&D.

The advanced products and services of the Fortune 75 Baxter Healthcare Corporation are designed to improve the quality of life throughout the world. We do it all by bringing together the best resources, the best technology and the best professionals in an environment of mutual cooperation and support.

Our Gene Therapy Business Unit is a growing research and development organization dedicated to providing new therapeutic modalities for the treatment of disease. Currently, we have the following opportunities available in our 400 acre R&D campus located in the northwest suburbs of Chicago.

▲ DIRECTOR OF GENE EXPRESSION

The Director of Gene Expression will work within the Immunoisolation and Protein Therapy Department. The successful candidate will join a team of cell biologists, immunologists and engineers working on the development of methods for the transplantation of genetically engineered, allogeneic cells that are encapsulated within synthetic membranes.

We are seeking an individual with a record of achievement in the development of unique, high level gene expression systems. The primary responsibility of this position is to lead a team focused on development of stable gene expression systems in mammalian cells. A Ph.D. in molecular biology or related discipline, plus postdoctoral experience is required. Candidates should have 7 or more years of industrial experience with at least 5 years experience in leading a research team.

▲ DIRECTOR OF VECTOR TECHNOLOGY

The Director of Vector Technology will lead a group of researchers dedicated to preparing novel expression vectors and will work in collaboration with a team of cell biologists in engineering mammalian cells to express therapeutic molecules.

Candidates should have a Ph.D. in molecular biology or cell biology with postdoctoral experience and 5 or more years of industrial experience with at least 3 years as a group leader or manager. Candidates should have a broad background in developing viral and non-viral expression vectors and a good publication record.

▲ VISITING SCIENTIST-IMMUNOLOGY

This position is for a Senior Immunologist who will collaborate with an existing team of researchers working on the development of methods for the transplantation of genetically engineered, allogeneic cells that are encapsulated within synthetic membranes. Successful candidates should have an established record in biomedical research with significant internationally recognized achievements. The appointment is for one year with the opportunity for a one year extension.

Candidates should also have a proven track record of achievement in the areas of cellular transplantation and molecular immunology. Expertise in the area of mechanisms responsible for allograft rejection are essential.

We provide a highly professional environment conducive to career development and a competitive compensation and benefits program. Please send resume with salary history, indicating position of interest, to: **Baxter Healthcare Corporation, Gene Therapy Business Unit, GT94109 Human Resources, WG2-3S, Rte 120 & Wilson Rd, Round Lake, IL 60073.** Equal Opportunity Employer.

**Biotech Group
Gene Therapy Business Unit**

Baxter

TARGETED INNOVATION GIVES IDEXX THE EDGE.

From immunoassays and DNA probes to molecular biology and instrumentation, IDEXX is utilizing state-of-the-science technologies to aggressively and successfully target niche markets worldwide. Our powerful new generation of detection products are now used in applications ranging from animal health to food and environmental testing. With a phenomenal growth pattern behind us and a solid growth strategy ahead, we are seeking top-notch professionals to add to our research team.

Research Scientist Food and Environmental Division Residue Detection

As a bench-level Scientist, you will be responsible for developing immunoassays for antibiotic residues, taking projects from feasibility experiments through product launch.

The successful candidate will possess a Ph.D. in Biochemistry or related subject; M.S. with appropriate experience will be considered. A minimum of 2 years' experience in small molecule immunoassay development, ability to work in a team environment and excellent interpersonal and communication skills are required. Experience in conjugation chemistry is desirable. Practical experience in an industrial R&D environment is a plus.

In addition to the above opening, IDEXX continues to generate unique opportunities for individuals who share our enthusiasm for discovery. We have openings at all levels of R&D including Research Scientists, Associates and Assistants.

Respond in confidence with CV and letter of interest to: Human Resources, Code SC527, IDEXX Laboratories, One IDEXX Drive, Westbrook, ME 04092. We are an Equal Opportunity Employer M/F/D/V.

POSTDOCTORAL POSITION

Skillman, New Jersey

Johnson & Johnson, the world's largest health care corporation and leader in wound healing research and development, is seeking first class candidates for two year postdoctoral positions at its Wound Healing Technology Resource Center in Skillman, NJ. The post is with a specialist team of ten scientists with skills in biochemistry, cell biology, molecular biology, pharmacology, histopathology and wound healing biology. The post is temporary but could be extended, and there is a possibility of tenure for exceptional scientists. Johnson & Johnson will assist with relocation expenses and work permit issues. A generous salary package is also offered for the right candidate with the right background and interests.

Candidates should be strongly self motivated, confident and experienced in areas related to connective tissue biology and preferably, wound healing. Applicants with experience with relevant animal models are especially encouraged to apply. Knowledge and experience of techniques in cell biology, biochemistry and molecular biology would be useful. Please apply direct, preferably by fax, attaching your CV, to Dr. Jeff Geesin in the United States, Tel: 908-874-1356, Fax: 908-874-1254.

Johnson & Johnson
MEDICAL INC.

FOURNIER PHARMA GMBH

Fournier Pharma GmbH NMR Spectroscopist

Fournier Pharma GmbH is the German subsidiary of Fournier Laboratories, a French Pharmaceutical Company with a strong commitment in cardiovascular Research.

We are looking for a NMR spectroscopist for our new Research Center in Heidelberg.

The successful candidate will be involved in structure elucidation, conformation analysis of peptides and peptide mimetics and lipid-peptide interaction studies.

He or she will collaborate with peptide chemists and biochemists in Drug Discovery Research and will be in charge of a brand new Bruker Avance TM DRX 500 MHz spectrometer.

Department resources include high resolution mass spectrometer, computers for molecular design and conformational analysis, CD spectrometer, peptide synthesizers, peptide sequencer, amino acid analysers, HPLC's, HPCE,...

This is an excellent opportunity to join a dynamic team developing novel therapeutic approaches for treating atherosclerosis and related cardiovascular disease.

Applicants must have a Ph.D. in Physical Chemistry or Chemistry as well as two to three years of post doctoral experience and a proven track record of solving peptide or peptide mimetic structures.

Send resume to:

Fournier Pharma GmbH
Department of Human Resources
Mr. Dewes
Justus-von-Liebig-Str. 16
66280 Sulzbach
Germany

THE UNIVERSITY OF THE WEST INDIES

St. Augustine, Trinidad

Applications are invited for the following post:

LECTURER/ ASSISTANT LECTURER IN HUMAN ANATOMY

School of Medicine

Applicants should have a PhD in Anatomy and a medical degree would be an asset. Experience in teaching Gross Anatomy, Histology or Embryology is desirable.

ANNUAL SALARY RANGE: Medical: Lecturer TT\$78,624 - TT\$86,880 (B) - TT\$100,824; Assistant Lecturer TT\$65,412 - TT\$69,540 plus an Institutional Allowance ranging from 10% - 30% of basic salary depending on post. Non-Medical: Lecturer TT\$67,056 - TT\$79,440 (B) - TT\$95,436; Assistant Lecturer TT\$52,500 - TT\$56,628. **Special Allowance (Medical and Non-Medical):** Lecturer below Bar TT\$1,680; Lecturer above Bar TT\$3,024 p.a.

Passages, Pension, Housing Allowances, Study and Travel and Book Grants. Applications naming three referees and detailing qualifications and experience to the Registrar, University of the West Indies, St Augustine, Trinidad, as soon as possible. Further particulars sent to all applicants; these are also available from Appointments (42822), Association of Commonwealth Universities, 36 Gordon Square, London WC1H 0PF, UK (tel. 071 387 8572 ext. 206; fax 071 383 0368).



THE SWEDISH UNIVERSITY OF AGRICULTURAL SCIENCES

hereby announces two vacant positions at the Department of Horticulture, Alnarp, as

PROFESSOR IN GREENHOUSE PRODUCTION, HORTICULTURAL CROPS

Ref no 2111/94-1532

The chair is declared vacant on certain conditions.

PROFESSOR IN FIELD PRODUCTION, HORTICULTURAL CROPS

Ref no 2110/94-2939

from September 1995.

More detailed information concerning the positions can be obtained from the Head of Department, Professor Paul Jensen (phone no +46 40 41 50 00, fax no +46 40 46 04 41), The Swedish University of Agricultural Sciences, Department of Horticulture, Box 55, S-230 53 Alnarp, Sweden. Magdalena Fagerberg (phone no +46 18 67 10 47, fax no +46 18 67 17 00) will be able to answer all queries concerning the formal procedures. The complete advertisement can be obtained from the Registrar, phone No +46 18 67 10 18 or +46 18 67 18 85. Fax +46 18 67 35 09.

An application in English, marked with reference number should be submitted to the Registrar of the Swedish University of Agricultural Sciences, Box 7070, S-750 07 Uppsala, Sweden, no later than June 15, 1994.



Roche

Our Department of Biology, Pharmaceutical Research New Technologies is looking for a

Laboratory Leader/Protein Biochemistry

The successful candidate will be responsible for the preparation of native and recombinant membrane proteins for structural analyses and for the development of functional assays to study ligand-receptor and receptor-associated protein(s) interactions.

In addition to a strong background in biochemistry, several years of postdoctoral experience in the field of membrane protein characterization and a strong commitment to methodological research in this area are equally important.

Please send full details to our Personnel Department, Mrs. S. Gräzer, quoting reference Science 60/94/Grä.

F. Hoffman-La Roche Ltd,
P.O. Box Ch-4002 Basel

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**THE UNIVERSITY
OF HONG KONG**

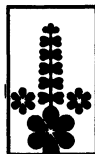
**Lectureship in the Department
of Physiology
(Ref. 93/94-69)**

Applications are invited for two posts of Lectureship in the Department of Physiology, tenable from 1 September 1994 and 1 April 1995 respectively. The appointments will be made on a fixed-term basis for a period of three years, with a possibility of renewal.

The appointees will be required to participate in the teaching of physiology to dental, medical and speech and hearing sciences students. Preference will be given to applicants with higher degrees in Physiology or medical or dental degrees.

Annual salary [non-superannuable but attracting 15% (taxable) terminal gratuity] is on an 11-point scale with starting salary depending on qualifications and experience: HK\$377,220 - HK\$630,180 (approx. US\$48,990 - US\$81,842; US Dollar equivalents as at 5 May 1994). At current rates salaries tax will not exceed 15% of gross income. Children's education allowances, leave, and medical benefits are provided; housing or tenancy allowances are also provided in most cases at a charge of 7.5% of salary.

Further particulars and application forms may be obtained from the Appointments Unit, Registry, The University of Hong Kong, Hong Kong (fax: (852) 559 2058; E-mail: APPTUNIT@HKUVM1.HKU.HK). Particulars are also available on the University's listserv accessed by E-mail as "listserv@hkuvml.hku.hk" (specify "get apptment filelist" for list of vacant posts, and "help" for details of listserv commands). Closes 8 July 1994.



LUPIN

LUPIN Group of Companies is a technology intensive, progressive, professionally managed, rapidly expanding group committed to excellence in the areas of bulk drugs, pharmaceuticals and agrochemicals. Excellent technological achievements and major growth impulses have combined to create a visible level of excitement and the management has now set itself the mission to achieve sales turnover of \$ 330 million (Rs. 10 billion) by 1995.

LUPIN CHEMICALS LIMITED is a group Company which has set up a state-of-the-art fermentation facility in Tarapur, near Bombay, for the manufacture of Rifampicin from basic stage with an initial investment of over \$ 26 million (Rs.825 million). The plant has been commissioned in June 1993. A further investment of \$ 50 million (Rs. 1500 million) is planned for the next 3 years for expansion/addition of products. The Company is looking for enterprising professionals to assume responsibilities as:

**PRESIDENT
(FERMENTATION)**

The incumbent shall be a hands on antibiotics fermentation man. He should have Ph.d in Microbiology or Biochemistry or Masters in Chemical Engineering. He must have demonstrative skills in technology and man management, and commercial acumen. Age below 50 years.

Preference will be given to candidates having experience in Rifampicin, Erythromycin and similar products.

**GENERAL MANAGER
(MICROBIOLOGY)**

The incumbent will motivate and lead a team of Microbiologists, Biochemists and other professionals for effective operation of the Antibiotic Fermentation Laboratories, comprising of Plant Laboratory and Fermentation Strain Improvement Laboratory.

The Candidate should have Ph.d in Microbiology from a reputed university with about 10 years of intensive hands on experience in running an industrial fermentation laboratory and process scale-ups. Good knowledge of molecular biology and microbial genetics with experience in industrial stain improvement and fermentation process development is desired. Age below 45 years.

The Company offers excellent opportunities for advancement. The compensation and perks will be among the most attractive, befitting the person. Kindly write in strict confidence to:

Mr.K.K. Sharma, Managing Director,

LUPIN CHEMICALS LIMITED, 159 CST Road, Santacruz (East), Bombay 400 098.

OR call Tel No. 6113485 (IST 09.15 Hrs. to 18.15 Hrs.)
Tel.No.6105107 (IST 21.00 Hrs. to 22.30 Hrs.)

POSITIONS OPEN

POSTDOCTORAL/RESEARCH ASSOCIATE. Investigation of synaptic integration in retina using patch-clamp recording from slices. Position open immediately. Must have previous experience either with retina or with single-cell electrophysiology. Salary \$27,000 plus health. Send curriculum vitae and three references to: **Prof. Gordon L. Fain, Departments of Ophthalmology and Physiological Sciences, J.S.E.I., UCLA School of Medicine, Los Angeles, CA 90024. FAX: (310) 825-0841.**

POSTDOCTORAL RESEARCH AFFILIATE position (NIH-FUNDED) available immediately. Ph.D. in Molecular Biology/Molecular Immunology. Applicant should have expertise in working with mRNA, preparation of cDNA, Northern, Southern, and Western Analysis and PCR technique for evaluation of mRNA and cDNA. Tissue culture experience is also required. This individual will be involved in preparation of guinea pig's recombinant cytokines and probes for detection of cytokines by *in situ* hybridization in the guinea pig model of acquired and congenital syphilis. Salary ranges from \$19,600 to \$25,000 depending on years of experience. Send curriculum vitae and three letters of recommendations to: **Dr. Victoria Wicher, Wadsworth Center for Labs and Research, New York State Department of Health, Albany, NY 12201. FAX: (518) 473-1326. Equal Opportunity Employer.**

POSTDOCTORAL RESEARCHER POSITION. To investigate the use of polymorphisms in human DNA for forensic analysis and for mapping of genetically based diseases due to single gene or polygenic mutations. Familiarity with statistical methods for analyzing population data is desired. Candidate should be experienced in DNA sequencing, PCR-based amplification of mini and microsatellites and general methodologies for DNA analysis. Position open until filled, please submit curriculum vitae and three letters of reference to: **Dr. Terry W. Fenger, Department of Microbiology, Immunology and Molecular Genetics, Marshall University School of Medicine, 1542 Spring Valley Drive, Huntington, WV 25755-9330.**

Marshall University is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

CELLULAR NEUROBIOLOGY POSTDOCTORAL RESEARCH ASSOCIATE POSITION available (fall 1994) to study epigenetic influences of transported factors (including neurotrophins) on the regulation of specific neuropeptides and neurotransmitter enzymes in mature visceral sensory neurons. Ph.D. in neuroscience or related biomedical science and an interest in the regulation of transmitter expression and transmitter plasticity in adult animals is required. Histology and immunocytochemistry, and primary neuronal cultures is desirable. This person will be an employee of the Henry M. Jackson Foundation. Send curriculum vitae and names of 3 references to: **C.J. Helke, Uniformed Services of the Health Sciences (USUHS), 4301 Jones Bridge Road, Bethesda, MD 20814 USA. Affirmative Action/Equal Opportunity Employer.**

RESEARCH SCIENTIST

Position is immediately available to study HIV-1 and B cell lymphokine expression at the cellular and molecular levels. Specific requirements include strong background in molecular biology and cellular immunology of HIV-1. Excellent salary and fringe benefits. Send résumé, names and addresses of three references and salary requirements to: **David Benjamin, M.D., 1232 James Cancer Hospital and Research Institute, The Ohio State University Hospitals, 300 West 10th Avenue, Columbus, OH 43210-1228. Telephone: (614) 293-3716, FAX: (614) 293-4372.**

MAJOR NATIONAL PATENT LAW FIRM located in New York City seeks highly qualified Ph.D. **SCIENTISTS** in biomedical fields interested in second career opportunities in Intellectual Property Law. Demonstrated technical writing skills essential. Competitive salaries and benefits, and opportunities for challenging assignments. *M/F/V/H, Equal Employment Opportunity.* Send résumé to:

**BOX 50
SCIENCE Classified Advertising
1333 H Street, N.W., Room 814
Washington, DC 20005**

POSITIONS OPEN

RESEARCH ASSOCIATE. Position immediately available in prokaryotic genetics laboratory to study basic and applied aspects of bacterial genes encoding biodegradable plastic. Ph.D. and experience in recombinant DNA techniques required. Applicant will also supervise undergraduate researchers and teach an occasional lecture. Salary range is from \$24,000 to \$28,000, depending on experience and qualifications. Send curriculum vitae and names of three professional references to: **Dr. Douglas Dennis, Department of Biology, James Madison University (JMU), Harrisonburg, VA 22807. JMU is an Affirmative Action/Equal Opportunity Employer and specifically encourages applications from women and minorities.**

SENIOR RESEARCH SCIENTIST DRUG DISPOSITION

RHONE-POULENC RORER, a global leader in pharmaceutical research, has a position available for an individual to investigate drug disposition issues associated with new discovery compounds. Duties include developing original research proposals, conducting experiments relating to cellular or molecular drug transport, and presenting results.

To qualify, you should have a Ph.D. in Chemistry, Biochemistry or related discipline with 2 to 3 years of molecular pharmacology experience. A strong background in drug metabolism and membrane transport is required.

RHONE-POULENC RORER offers a highly competitive salary, a challenging professional work environment and opportunities for continued growth. For immediate consideration, forward your résumé with salary history to: **RHONE-POULENC RORER RESEARCH AND DEVELOPMENT, Department R-140, Mail Stop H15, 500 Arcola Road, Collegeville, PA 19426. We are an Equal Opportunity Employer, M/F/D/V.**

SENIOR MOLECULAR NEUROBIOLOGIST

The Laboratory of Neurochemistry, Division of Intramural Research, National Institute of Neurological Disorders and Stroke, National Institutes of Health, seeks a candidate for a senior molecular neurobiologist to study the molecular mechanisms of Central Nervous System development in *Drosophila melanogaster* with particular emphasis on the biology of neuronal precursor genes. The candidate must have previous postdoctoral experience in studying transcriptional regulation of gene expression, cDNA cloning, protein expression and purification, *in situ* hybridization, immunochemical techniques and an international record of scientific publications in referred journals. The candidate is expected to develop an original project in connection with other ongoing studies on CNS development in flies. Depending on qualifications, the salary range is \$40,000 to \$50,000 per year. Interested candidates should send curriculum vitae and three letters of reference to: **Dr. Ward Odenwald, National Institutes of Health, Laboratory of Neurochemistry, 9000 Rockville Pike, Building 36, Room 4D20, Bethesda, MD 20892.**

NIH is an Equal Opportunity Employer

MOLECULAR BIOLOGIST

The Midland Certified Reagent Company, a leading manufacturer of synthetic DNA, seeks an experienced molecular biologist for its expanding molecular biology department. The prospective candidate must be able to work independently and efficiently in all aspects of synthetic gene construction including bacteriology, molecular cloning, and DNA sequencing. The position entails flexible evening/night shift work with weekend overtime available. Candidates for this position will offer a B.S. or M.S. degree in molecular biology, microbiology, or biochemistry and laboratory and/or research experience in molecular biology techniques.

The Midland Certified Reagent Co. offers competitive wages, a medical benefits program, and assistance with relocation to qualified candidates. For consideration please submit curriculum vitae, academic transcript, and publication reprints to: **The Midland Reagent Co., 3112-A West Cuthbert Avenue, Midland, TX 79701, c/o: Molecular Biology Department, Telephone: (915) 694-7950.**

POSITIONS OPEN

**DEPARTMENT OF AGRICULTURE (USDA)
AGRICULTURAL RESEARCH SERVICE (ARS)**

RESEARCH MICROBIAL MOLECULAR BIOLOGIST, Biocentral of Plant Diseases Laboratory, Beltsville, Maryland. (Research Associate—2-Year Appointment).

ARS is seeking a Research Microbial Molecular Biologist to investigate the genetics and molecular biology of biological control microorganisms, especially antagonistic or pathogenic fungi effective against pathogens or undesirable plants and to develop a fundamental research program studying strain relatedness of biological control agents using restriction fragment length polymorphism (RFLP) or other molecular techniques.

Candidate must have a Ph.D. degree and experience in molecular biology/plant pathology. *Must be a U.S. citizen.* Salary is commensurate with experience (range \$35,045 to \$45,561 per annum). For information on the research program and/or position, contact (**Dr. Robert D. Lumsden, Telephone: 301-504-5682, FAX: 301-504-5968**). For information on application procedures/forms contact (**Roberta Saah, Telephone: 301-344-2949**). Applications in response to this advertisement should be marked with announcement number **RA-4-005**. Mail completed applications to: **Dr. R. D. Lumsden, USDA-ARS, Biocentral of Plant Diseases Lab, Building 011A, Room 274, BARC-West, Beltsville, MD 20705, by June 30, 1994. An Equal Opportunity Employer.**

RESEARCH NEUROVIROLOGIST

The Department of Neurology at the University of Minnesota Medical School has an opening for a Research Associate virologist. The position will be an annually renewable appointment. This investigator will participate in studies using animal models of pathogenesis of HIV infection of the nervous system and its relation to neural dysfunction and the AIDS dementia complex. These studies are carried out in the context of a multidisciplinary effort that involves complementary laboratory models and clinical research. Candidates must have a Ph.D. in virology or a related field and past experience and a publication record in contemporary pathogenetic and molecular neurovirology, as well as a record of or high potential for gaining independent grant support. Applicants should respond with curriculum vitae to: **Dr. Richard W. Price, Professor and Head, Department of Neurology, University of Minnesota, Box 295 UMHC, 420 Delaware Street Southeast, Minneapolis, MN 55455.** Last date for receipt of applications: June 15, 1994. Start Date: July 1, 1994. *The University of Minnesota is an Equal Opportunity Educator and Employer.*

CARDIOVASCULAR MOLECULAR BIOLOGISTS

Applications are invited for research staff positions as independent investigators in the Montreal Heart Institute Research Centre. A physical expansion will create space for several new laboratories in molecular biology that will complement and interact with ongoing research programs in cardiovascular cellular electrophysiology and biophysics, vascular biology, myocardial protection, and myocardial failure and remodeling. Candidates should have Ph.D. and/or extensive postdoctoral training in molecular biology. Particular areas of interest to the Centre include ion channel structure-function and regulation, the control of myocardial and vascular cell expression and growth, and factors governing the arterial response to injury and atherogenesis. Full start-up funding is available, as well as support for ongoing research programs. Appropriate candidates will be eligible for tenure-track appointments on the Faculty of Medicine of the University of Montreal. Please send your application to: **Dr. Stanley Nattel, Director, Research Centre, Montreal Heart Institute, 5000 Bélanger Street East, Montréal, Québec, Canada H1T 1C8.**

BIOMECHANICAL ENGINEER

The University of Nebraska Medical Center Department of Orthopaedic Surgery is seeking a full-time biomechanical engineer, Ph.D., capable of running a multifaceted orthopaedic surgery laboratory, and participate in postgraduate education. *The University of Nebraska Medical Center is an Equal Opportunity/Affirmative Action Employer.* Send curriculum vitae to: **James R. Neff, M.D., Department of Orthopaedic Surgery, University of Nebraska Medical Center, 600 South 42nd Street, Box 981080, Omaha, NE 68198-1080.**

PLANT ECOLOGIST AND NEPA/PUBLIC INVOLVEMENT SPECIALIST

ARGONNE NATIONAL LABORATORY

Plant Ecologist: Argonne's main facility located near Chicago, Illinois, is seeking qualified applicants with experience in conducting environmental studies on the effects of human disturbances on terrestrial and wetland plant communities. The person selected will have A Ph.D. with extensive knowledge of basic plant ecology, plant community structure and successional dynamics. Considerable skill in conducting research and analytical assessment studies and in computerized data management, along with strong communication skills and a record of peer reviewed publications are also prerequisites. Reply to Box #113043 - Ph.D. with 0-1 year experience or Box #113045 - Ph.D. with 2-5 years experience.

NEPA/Public Involvement Specialist: Argonne's Washington, D.C. Office is seeking applicants with a Ph.D. or equivalent in social science and 3-5 years of NEPA project management experience. We are especially interested in a person experienced in planning for and implementing public participation activities for federal programs/projects. Considerable knowledge in social impact analysis research techniques is required. Demonstrated record of technical publications and considerable written and oral skills are also prerequisites. Reply to Box #113037.

We offer an excellent salary commensurate with your background, as well as a comprehensive benefits plan. For prompt consideration, reference the applicable position number and send your resume to: Susan M. Walker, EAD-(insert appropriate Box #)-55, Employment and Placement, Argonne National Laboratory, 9700 South Cass Avenue, Argonne, IL 60439. Telecommunications Device for the Deaf - (708) 252-7722. Argonne is an equal opportunity/affirmative action employer.



JPL/NASA VISITING SENIOR SCIENTIST PROGRAM

Mission to Planet Earth Division Ocean Biogeochemistry

The Jet Propulsion Laboratory invites applications to the Visiting Senior Scientist Program to provide advice and assistance to management in the Ocean Biogeochemistry Program within the Science Division of the Office of Mission to Planet Earth at NASA Headquarters. The Visiting Senior Scientist oversees and coordinates multidisciplinary research and development activities in biological and chemical oceanography. These activities include process-oriented field campaigns, remote sensing, modeling, and instrument development efforts within NASA and coordination with other agencies and institutions, the commercial sector, and international organizations. The purpose of the program is to increase our understanding and ability to better predict the role of the ocean in earth system processes, especially with respect to the cycling of major biogeochemical elements. Process and modeling studies include in situ, aircraft, and satellite studies and primary productivity, phytoplankton dynamics, trace element fluxes (including carbon, nitrogen and other), and interactions between physical and biological processes in the open ocean, coastal regions, and between the land-atmosphere-ocean interactions. The Visiting Senior Scientist plays a major role in advising NASA on data management and technology development needs to support a cutting-edge national oceanography program.

The successful applicant would be expected to (1) provide advice and guidance on the management of the Ocean Biogeochemistry Program to effectively address NASA's research in global change; (2) act as Program Scientist for the SeaStar/SeaWiFS ocean color mission; (3) act as Program Scientist for various instruments of the Earth Observing System (EOS); and (4) interact with the scientific community, other agencies and institutions, and international organizations to build a robust research program.

Candidates must hold a Ph.D. or have accumulated equivalent experience in biological and chemical oceanography; a record of research publications in the refereed literature; be familiar with science funding mechanisms; and have strong verbal and written communication skills. Knowledge of U.S. and foreign satellite sensors, and experience in the use of satellite data is desirable.

Frequent travel and residence in the Washington, DC area is required. The start date is September 1, 1994 or as soon as possible. Normal assignment does not exceed two years. Appointees must be U.S. citizens or permanent residents.

Additional information about this position may be obtained from Anthony Janetos at NASA Headquarters (202) 358-0272.

Please provide curriculum vitae, biography, and the name and address of four references to: Dr. Frederick H. Shair, Jet Propulsion Laboratory, 4800 Oak Grove Rd., Mail Stop 183-900, Pasadena, CA 91109, (818) 354-8251.

An Equal Opportunity Employer M/F

The Integrated Approach To Brain Disease



Trophix Pharmaceuticals, Inc. is an early stage biopharmaceutical company devoted to developing novel therapeutics for neurological and neuropsychiatric disorders by integrating the latest advances in cell and molecular neurobiology, neuropharmacology and medicinal chemistry.

MOLECULAR PHARMACOLOGY

Research Scientist

As part of our drug discovery team, you will evaluate drug-receptor interactions using heterologous expression systems. The successful candidate will possess a Ph.D. in Pharmacology or Biochemistry, a minimum of two years Postdoctoral experience, and extensive knowledge of G-protein-coupled receptors and second messengers.

Research Associate

Candidates should possess a BS/MS in Biology, knowledge of receptor binding and second-messenger assays (RIA, ELISA, PI turnover), familiarity with computer spreadsheets & analysis programs, and a minimum of two years laboratory experience (industrial preferred).

CHEMISTRY

Research Scientist in Molecular Modeling

The qualified Ph.D.-level candidate must be familiar with current software packages in the area of drug discovery and be willing to work with a group of synthetic chemists in designing and selecting new drug candidates.

Research Scientist in Synthetic Chemistry

Candidates must have a BS/MS degree in chemistry, experience in the multi-step synthesis of organic molecules, interpretation of spectral data, and accurate record keeping.

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CELL AND MOLECULAR BIOLOGY

Postdoctoral Positions

Postdoctoral positions are available at the Worcester Foundation for Experimental Biology to study cellular and molecular aspects of development. These positions are supported by an NIH Training Grant and individual investigator awards. The faculty and their research interests are:

F. Rob Jackson: Molecular genetic analysis of circadian rhythms and other neural functions in *Drosophila*.

Daniel Kilpatrick: Cell-specific transcriptional regulation during differentiation of spermatogenic and somatic cells.

Elizabeth Luna: Structure and regulation of cytoskeleton-membrane attachment.

Clare O'Connor: Regulation of protein stability during gametogenesis.

Thor Pederson: Molecular and cell biology of gene expression, with emphasis on RNA-protein interactions and RNA processing.

Joel Richter: Gene expression during early *Xenopus* development.

Alonzo Ross: Nerve growth factor receptors and differentiation of neural tumors.

Greenfield Sluder: Timing and molecular control of mitotic events during early development.

Richard Vallee: The role of microtubule motors in mitosis and organelle transport; the role of GTPases in receptor-mediated endocytosis.

Yu-li Wang: Assembly and dynamics of actin and myosin in living cells.

George Witman: Molecular basis for flagellar movement; sensory transduction in *Chlamydomonas*; control of sperm maturation and capacitation.

David Wolf: Structure, function, and dynamics of nerve growth factor receptor.

Paul Zamecnik: Synthesis of modified oligonucleotides for chemotherapy.

Send curriculum vitae and names of references to the faculty member(s) of interest, c/o Personnel Office, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, MA 01545, USA.

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SENIOR RESEARCH SCIENTIST

We are developing treatments for respiratory distress syndrome and contrast agents for biomedical imaging, and seek individual with primary research focus in pulmonary physiology/pharmacology or diagnostic imaging. Will conduct independent research and develop new experimental models as needed to support preclinical efficacy for perfluorochemical liquid ventilation or use of novel ultrasound contrast agents. Requires PhD in Physiology, Biomedical Engineering, Pharmacology or related field with 0-3 yrs' post-grad exp. A desire and interest in working "hands-on" in the laboratory essential. **Code: SRS.**

Submit resume and salary history to: **Alliance Pharmaceutical Corp., Attn: HR, Code (see above), 3040 Science Park Road, San Diego, CA 92121.** No phone calls please. EOE.



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Staff Scientist

We have an immediate opening for a Staff Scientist on our growth factor team. This group is dedicated to the identification and characterization of factors which may be used in the treatment of peripheral neural and muscular disorders. An ideal candidate should possess skills in molecular genetics and cell biology, preferably applied to nerve and/or muscle biology. Candidates should have a Ph.D. with a minimum two to four years of experience in molecular and cellular biology or a related discipline and a strong desire to contribute to a team effort.

Cambridge NeuroScience, Inc., offers competitive salaries and benefits. For immediate consideration, send your resume, to: Cambridge NeuroScience, Inc., Human Resources-SM, One Kendall Square, Building 700, Cambridge, MA 02139.

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Rowe Chair of Human Molecular Medicine and Genetics: The University of California, Davis, School of Medicine announces the search for the Albert Holmes Powe Chair of Human Molecular Medicine and Genetics. The Rowe Chair will develop a basic research and teaching program in molecular medicine and genetics which can utilize mammalian, animal, human and/or cell culture models. The initiative will involve six tenure track positions funded by the School of Medicine and the Division of Biological Sciences which will strengthen the campus initiative in molecular and cellular biology. Incumbent will be expected to play a prominent leadership role in the recruitment of faculty who have demonstrated ability and achievement in investigator-initiated discovery research.

Successful candidates must possess an M.D. or Ph.D. degree and an outstanding record in high quality basic molecular biological discovery research.

Please forward the following: (1) letter describing research, teaching, and administrative background; (2) curriculum vitae; and (3) names and addresses of five references to Deans Gerald Lazarus and Mark McNamee c/o Office of the Dean, School of Medicine, 100 Medical Sciences I-C, East Health Sciences Drive, University of California, Davis, California 95616. This position will be "Open Until Filled". Applications should be received by October 1, 1994 for full consideration. The search committee will begin to review applications two months after publication of the position announcement.

RESEARCH UPDATE

Cyanamid now ranks sixth largest global crop protection company.

American Cyanamid Company's recent acquisition of Shell's international crop protection business has enhanced our standing in the global agricultural market raising our status from 10th to 6th largest. This development promises a significant increase in earnings and in the research and development of new products.

Post Doctoral Scientist Insecticide Discovery

We currently seek a Post Doctoral Scientist to join us in our goal of expanding the host-range of any given baculovirus to meet the control needs (within Lepidoptera) of specific crop situations. Successful candidate will investigate the genetic basis for baculovirus host-range limitation. This includes conducting non-target insect species evaluations with genetically engineered baculoviruses. We require a PhD or equivalent in entomology, molecular biology or virology and postdoctoral experience in standard molecular biology processes and techniques. Some background in virology is desirable.

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SENIOR VICE PRESIDENT FOR RESEARCH AND GRADUATE EDUCATION University of Hawaii at Manoa



The President/Chancellor and members of the Board of Regents of the University of Hawaii invite nominations and applications for the position of Senior Vice President for Research and Graduate Education at the University of Hawaii at Manoa. The appointment will be effective in Fall 1994.

The University of Hawaii system is comprised of 10 undergraduate and graduate campuses. As the largest of the 10 campuses, the University of Hawaii at Manoa offers doctoral and professional degrees in 55 areas of study, including law and medicine, with strengths that reflect its geographic advantage in the study of ocean and earth sciences, astronomy, biodiversity, and Asian and Pacific studies. UH-Manoa is a diverse, multi-cultural, international, research institution, with more than 20,000 undergraduate and graduate students, 5,500 employees, and an annual budget of \$290 million. An additional \$120 million in extramural funds is generated annually.

The Senior Vice President for Research and Graduate Education reports to the University of Hawaii President/Chancellor and serves as the chief policy advisor in areas of research, training, and graduate education. The Senior Vice President for Research and Graduate Education is responsible for the administration of research and training grants throughout the 10-campus system; determines policies, directions, and priorities for research, training, and graduate education; and oversees research institutes and graduate programs through the respective deans and directors. The Senior Vice President for Research and Graduate Education is responsible for promoting new initiatives, facilitating scholarly activity, and maintaining international standards of excellence in research, training, and graduate education.

Candidates should possess senior-level experience in the leadership and administration of large, diverse and complex organizations, preferably research universities, and a strong scholarly record. An earned doctorate or equivalent terminal degree and full professorial rank are requirements for the position.

Applicants should submit a current resume and a letter addressing their qualifications for the position in terms of the requirements above. Applications and nominations should be sent to:

Dr. Brian Issell, Chair
Search Committee for the Senior Vice President for Research and Graduate Education
c/o Assistant to the President
University of Hawaii
Bachman Hall 202, 2444 Dole Street
Honolulu, Hawaii 96822

The review of applications will begin June 30, 1994 and continue until the position is filled. The University of Hawaii is an equal opportunity/affirmative action institution and encourages applications from and nominations of women and minority candidates.

POSITIONS OPEN

MOLECULAR BIOLOGIST

Midwest Research Institute (MRI), a leading contract research organization is seeking an outstanding Molecular Biologist to develop methods and conduct analyses to support new programs in biotechnology, biopharmaceutical development, and preclinical toxicology studies. In addition, will support programs in bioremediation, and biomonitoring of air quality. Successful candidate will possess a Ph.D. with five years of experience with proven skills in microbiology and molecular genetics, especially DNA probe analysis, PCR, and gene cloning and with experience in infectious diseases, either research or diagnostics, bioanalysis, characterization, and isolation of complex biomolecules. The ability to communicate effectively and interact with clients and internal staff is also required. MRI offers competitive compensation, a comprehensive benefits package, paid relocation and a unique environment enhancing professional growth and challenge. Interested candidates, please FAX or send résumé to: Midwest Research Institute, Attention Human Resources RFE# 94-332-1, 425 Volker Boulevard, Kansas City, MO 64110-2299; Telephone: (816) 753-7600, FAX: (816) 753-8420, *Equal Employment Opportunity/Affirmative Action, M/F/D/V; a drug-screening employer.*

PHYSICIST. Requirements: Ph.D. (Physics), 2 years of experience in position or 2 years of experience in university teaching and research, or in postdoctoral research, plus experience in lab work in Solid State, Material Science, Optics and Laser Physics and in designing and evaluating experiments, knowledge of processing and making techniques of thin optical films and knowledge of optical and spectroscopic properties of molecules, material processing, and optical system design.

Candidate will be required to develop new materials for electro-optics and magneto-optics applications; prepare thin films and solutions; design, monitor and analyze lab experiments; design and conceive models to study the optical properties of materials; make Electronic Energy Calculations and formulate theories; calculate and model the Radiation Matter Interaction and Radiation Propagation in materials; achieve compact optical design for application specific optics. \$40,000 per year. 40 hours per week. Apply promptly by 2 copies of résumé: Department of Employment and Training, Case # 40143, P.O. Box 8968, Boston, MA 02114.

UNIVERSITY OF PENNSYLVANIA

Available immediately for studies on anesthetic modulation of vascular cell function. Mechanisms being examined include signal transduction and mediator production in cultured vascular cells, and microvascular and regional hemodynamics in intact animals. Applicants should have a Ph.D. in biological/life science. Experience in intact animal models to study cardiovascular function and microcirculatory dynamics and tissue culture preferred. Applicants should send curriculum vitae and names of three references to: Dr. Alex Loev, Department of Anesthesia, University of Pennsylvania, 3400 Spruce Street, Philadelphia, PA 19104-4283. E-mail to: loev@A.1.mscf.upenn.edu.

ANNOUNCEMENTS

me FUND

Dutch M.E. Award

The trustees of the Dutch M.E. Fund and its Science Board will offer an award, consisting of a sculpture and 10,000 Dutch guilders, for the best scientific article on M.E. (myalgic encephalomyelitis, also known as "chronic fatigue syndrome"), published on or after January 1, 1993. The winner is expected to accept the award in person and give the Dutch M.E. Award Lecture. Travel and accommodation expenses will be paid for.

Applicants must send an offprint or photocopy of their article, together with a cover letter stating their candidacy, to the secretariat of the Dutch M.E. Fund before September 1, 1994. The award ceremony is scheduled for early December 1994.

For further details, please contact: Dutch M.E. Fund, Pres. Kennedylaan 745, 1079 MR Amsterdam, The Netherlands. Telephone: +31206445566, FAX: +31206445440.

MEETINGS

Association de Recherche pour le Traitement des Séropositifs (ARTS)

Hôpital Laënnec, Université de Paris V

First International Symposium on CELLULAR APPROACHES TO THE CONTROL OF HIV DISEASE
Paris, July 11-12, 1994

Organizers: Jean-Marie Andrieu, Wei Lu, Philippe Cramer

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- Immune activation and pathogenesis of HIV infection.
- Activation-induced apoptosis in the immune system and HIV disease.
- Mediators of T-cell/macrophage activation, apoptosis, and HIV replication.
- Therapeutic implications.

Abstracts (one-page A4) are welcome by FAX (+33 1 4222-0384 or +33 1 4439-6465). Registration: all information can be obtained from: S'cape/HIV, 8 rue Severo, 75014 Paris; Telephone: +33 1 4542-8874, FAX: +33 1 4044-5257.

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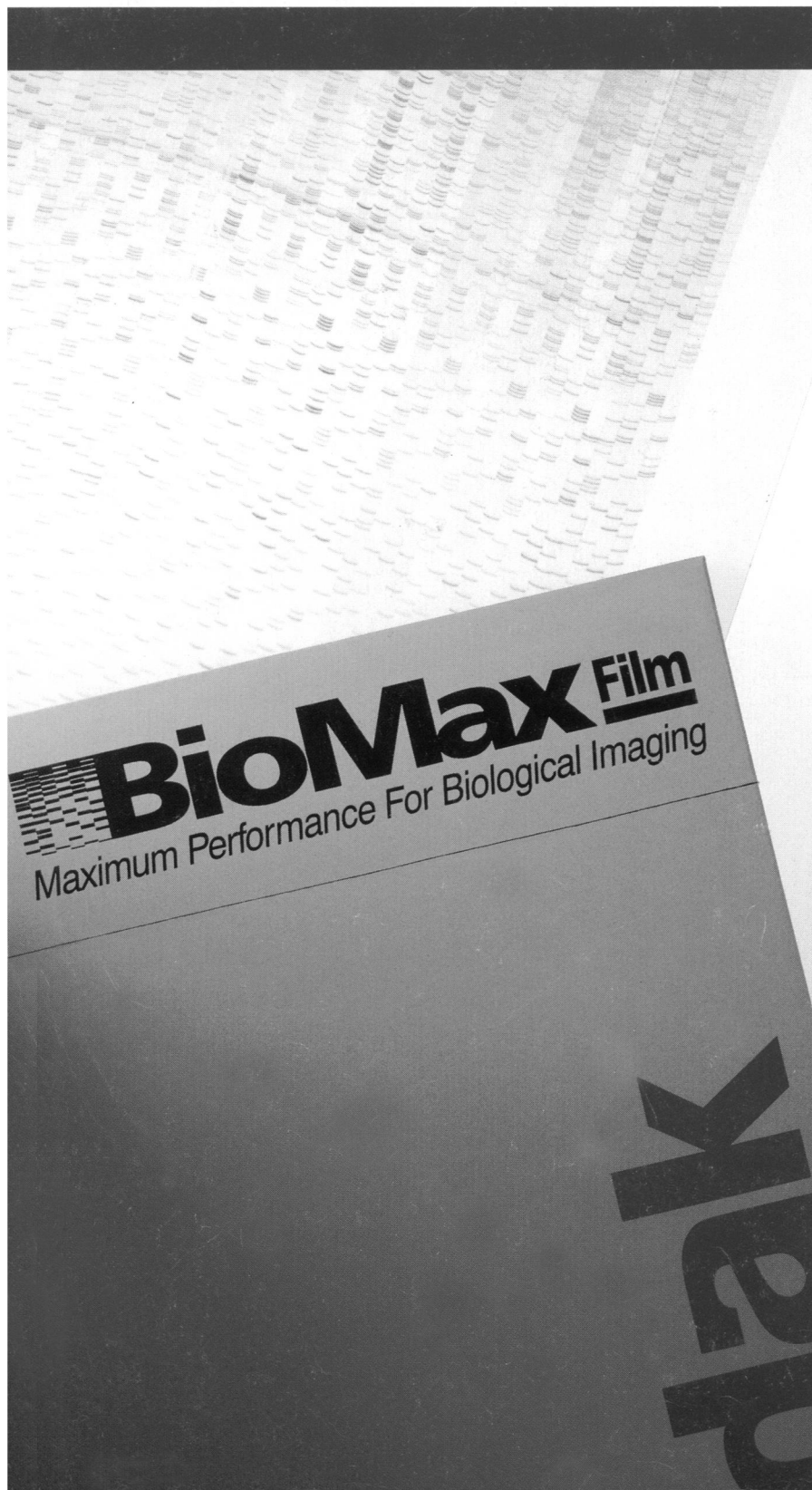
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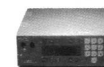
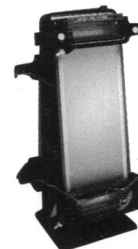
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